

APPENDIX 5

Adopted Mitigation Measures – Rice Solar Energy Project

This Appendix 5 to the Record of Decision (ROD) of the U.S. Department of the Interior (DOI) Bureau of Land Management (BLM) for the Rice Solar Energy Project (RSEP) and associated amendment to the California Desert Conservation Area Plan (1980, as amended) (CDCA Plan) identifies all of the mitigation measures relevant to the project that have been adopted and are enforceable by the BLM in connection with the BLM's administration of public lands within the boundary of the selected alternative. The California Energy Commission (CEC), through its licensing process, issued a license for construction and operation of the RSEP on December 15, 2010. The RSEP also would require an electrical transmission interconnection authorization from Western Area Power Administration (Western) for transmitting the power it would generate. Further, the Department of Energy (DOE) Loan Guarantee Program (LGP) is considering approval of a loan guarantee for the RSEP. The decision to be made, and mitigation measures and conditions to be imposed, by each of these agencies is independent of all other agencies' decisions and requirements. This ROD and the mitigation measures identified in this Appendix 5 apply only to the two ROW and one CDCA Plan amendment decisions of the BLM. Other agencies are responsible for issuing their own decisions, and imposing and enforcing their own mitigation measures for the RSEP.

These mitigation measures are based on comprehensive environmental analysis and full public involvement and reflect resolution of the issues brought to the BLM, CEC, and Western throughout the process. The BLM, CEC, and Western engaged highly qualified technical experts to analyze the environmental effects of the RSEP. During the scoping process and following the publication of the October 2010 Staff Assessment and Draft Environmental Impact Statement (SA/DEIS), which was jointly prepared by the BLM and CEC, other agencies, a tribe, organizations and members of the public submitted comments that enhanced these agencies' consideration of environmental issues relevant to this project. The BLM, Western, U.S. Fish and Wildlife Service, CEC and other consulted agencies used their expertise and existing technology to address the important issues of environmental resource protection and, on this basis, developed the mitigation measures carried forward to the CEC's December 15, 2010, Commission Decision, the BLM's Abbreviated Final Environmental Impact Statement/Plan Amendment (FEIS/PA), and this ROD. In addition, BLM will hold Rice Solar Energy, LLC (RSE) responsible for all of the requirements outlined in Appendix 2, Biological Opinion, and Appendix 3, Memorandum of Agreement. (Applicant-proposed measures, designated "AMs," identified in the FEIS/PA are part of the Project, are not agency-imposed mitigation measures, and so not set forth below). BLM adopts all practicable means to avoid or minimize environmental harm from the RSEP, and so has adopted the mitigation measures identified herein. BLM and CEC jointly stipulate to the mitigation measures set forth in Table A5-1:

TABLE A5-1
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure
<p>GENERAL</p> <p>GEN-1: The project owner shall design, construct, and inspect the project in accordance with the 2007 (or the latest edition in effect when initial project engineering designs are submitted for review) California Building Standards Code (CBSC), also known as Title 24, California Code of Regulations, which encompasses the California Building Code (CBC), California Building Standards Administrative Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Energy Code, California Fire Code, California Code for Building Conservation, California Reference Standards Code, and all other applicable engineering LORS in effect at the time initial design plans are submitted to the CBO for review and approval. The CBSC in effect is the edition that has been adopted by the California Building Standards Commission and published at least 180 days previously. The project owner shall ensure that all the provisions of the above applicable codes are enforced during the construction, addition, alteration, moving, demolition, repair, or maintenance of the completed facility. All transmission facilities (lines, switchyards, switching stations, and substations) are covered in the Conditions of Certification in the Transmission System Engineering section of this Decision.</p> <p>In the event that the initial engineering designs are submitted to the CBO when the successor to the 2007 CBSC is in effect, the 2007 CBSC provisions shall be replaced with the applicable successor provisions. Where, in any specific case, different sections of the code specify different materials, methods of construction, or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern.</p> <p>The project owner shall ensure:</p> <ul style="list-style-type: none"> A) That all contracts with contractors, subcontractors, and suppliers clearly specify that all work performed and materials supplied comply with the codes listed above. B) The project owner shall submit plans, calculations, and other related documents that have been specifically developed for the RSEP project to the CPM and the CBO. <p>Verification: Five days prior to requesting the issuance of the certificate of occupancy, the project owner shall submit to the CPM and the CBO a statement of verification, signed by the responsible design engineer, attesting that all design, construction, installation, and inspection requirements of the applicable LORS and the Energy Commission's Decision have been met in the area of facility design. The project owner shall provide the CPM a copy of the certificate of occupancy within 30 days of receipt from the CBO.</p> <p>Once the certificate of occupancy has been issued, the project owner shall inform the CPM at least 30 days prior to performing any construction, addition, alteration, moving, demolition, repair, or maintenance on any portion(s) of the completed facility that requires CBO approval for compliance with the above</p> <hr/> <p>GEN-2: Before submitting the initial engineering designs for CBO review, the project owner shall furnish the CPM and the CBO with a schedule of facility design submittals, master drawings, and master specifications list. The master drawings and master specifications list shall contain a list of proposed submittal packages of designs, calculations, and specifications for structures, systems, and equipment. Major structures, systems, and equipment are structures and their associated components or equipment that are necessary for power production, costly or time consuming to repair or replace, are used for the storage, containment, or handling of hazardous or toxic materials, or could become potential health and safety hazards if not constructed according to applicable engineering LORS. The schedule shall contain the planned date of each submittal to the CBO. To facilitate audits by Energy Commission staff, the project owner shall provide specific packages to the CPM upon request. In addition to the design submittals referenced above, plans and calculations for all construction work shall be submitted to the CBO for approval.</p> <p>Verification: At least 60 days (or a project owner and CBO approved alternative time frame) prior to the start of rough grading, the project owner shall submit to the CBO and to the CPM the schedule, the master drawings, and master specifications list for review and approval. These documents shall be the pertinent design documents for the major structures, systems, and equipment defined above in Condition of Certification GEN-2. Major structures and equipment may be added to or deleted from the list only with CPM approval. The project owner shall provide schedule updates in the monthly compliance report.</p>

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

GEN-3: The project owner shall make payments to the CBO for design review, plan checks, and construction inspections based upon a reasonable fee schedule negotiated between the project owner and the CBO. These fees may be based on hourly rates or the valuation of the facilities reviewed, or may be otherwise agreed upon by the project owner and the CBO. A copy of the contract between the owner and the CBO shall be submitted to the CPM for review and approval by Staff.

Verification: The project owner shall make the required payments to the CBO in accordance with the agreement between the project owner and the CBO. The project owner shall send a copy of the CBO's receipt of payment to the CPM in the next monthly compliance report indicating that applicable fees have been paid. The CBO shall inform the CPM if the project owner has not met its obligations as specified in the agreement between the project owner and the CBO for payments related to CBO services.

GEN-4: Prior to the start of rough grading, the project owner shall assign a California- registered architect, or a structural or civil engineer, as the resident engineer (RE) in charge of the project. All transmission facilities (lines, switchyards, switching stations, and substations) are addressed in the Conditions of Certification in the Transmission System Engineering section of this Decision. The RE shall be aware of construction activities at the project site at all times. However, he/she is not required to be physically present at the job site as long as the construction work is being performed as delegated below.

The RE may delegate responsibility for portions of the project to other registered engineers. Registered mechanical and electrical engineers may be delegated responsibility for mechanical, plumbing, and electrical portions of the project, respectively. A registered civil engineer may be delegated responsibility for civil engineering aspects of the project such as grading, storm water pollution prevention practices (SWPPP), storm water management practices (SWMP), drainage, erosion, sedimentation control programs (DESCP), and similar aspects of civil engineering. A project may be divided into parts, provided that each part is clearly defined as a distinct unit. Separate assignments of general responsibility may be made for each designated part.

The RE or his/her delegate shall:

- A) Monitor progress of construction work requiring CBO design review and inspection to ensure compliance with LORS;
- B) Ensure that construction of all facilities subject to CBO design review and inspection conforms in every material respect to applicable LORS, these Conditions of Certification, approved plans, and specifications;
- C) Prepare documents to initiate changes in approved drawings and specifications when either directed by the project owner or as required by the Conditions of the project;
- D) Be responsible for providing project inspectors and testing agencies with complete and up-to-date sets of stamped drawings, plans, specifications, and any other required documents;
- E) Be responsible for the timely submittal of construction progress reports to the CBO from the project inspectors, the contractor, and other engineers who have been delegated responsibility for portions of the project; and
- F) Be responsible for notifying the CBO of corrective action or the disposition of items noted on laboratory reports or other tests when they do not conform to CBO-approved plans and specifications.

The resident engineer (or his delegate) must be located at the project site, or be available at the project site within a reasonable period of time, during any hours in which construction takes place.

The RE shall have the authority to halt construction and to require changes or remedial work if the work does not meet requirements.

If the RE or the delegated engineers are reassigned or replaced, the project owner shall submit the name, qualifications, and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer.

Verification: At least 30 days (or project owner and CBO approved alternative time frame) prior to the start of rough grading, the project owner shall submit to the CBO for review and approval the resume and registration number of the RE and any other delegated engineers assigned to the project. The project owner shall notify the CPM of the CBO's approvals of the RE and other delegated engineer(s) within five days of the approvals.

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

If the RE or the delegated engineer(s) is subsequently reassigned or replaced, the project owner has five days to submit the resume and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer within five days of the approval.

GEN-5: Prior to the start of rough grading, the project owner shall assign at least one of each of the following California-registered engineers to the project: a civil engineer; a soils, geotechnical, or civil engineer experienced and knowledgeable in the practice of soils engineering; and an engineering geologist. Prior to the start of construction, the project owner shall assign at least one of each of the following California-registered engineers to the project: a design engineer who is either a structural engineer or a civil engineer fully competent and proficient in the design of power plant structures and equipment supports; a mechanical engineer; and an electrical engineer. (California Business and Professions Code section 6704 et seq., and sections 6730, 6731 and 6736 require state registration to practice as a civil engineer or structural engineer in California). All transmission facilities (lines, switchyards, switching stations, and substations) are addressed in the Conditions of Certification in the Transmission System Engineering section of this Decision.

The tasks performed by the civil, mechanical, electrical, or design engineers may be divided between two or more engineers, as long as each engineer is responsible for a particular segment of the project (for example, proposed earthwork, civil structures, power plant structures, equipment support). No segment of the project shall have more than one responsible engineer. The transmission line may be the responsibility of a separate California-registered electrical engineer.

The project owner shall submit to the CBO, for review and approval, the names, qualifications, and registration numbers of all responsible engineers assigned to the project.

If any one of the designated responsible engineers is subsequently reassigned or replaced, the project owner shall submit the name, qualifications, and registration number of the newly assigned responsible engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer.

A) The civil engineer shall:

- 1) Review the foundation investigations, geotechnical, or soils reports prepared by the soils engineer, the geotechnical engineer, or by a civil engineer experienced and knowledgeable in the practice of soils engineering;
- 2) Design (or be responsible for the design of), stamp, and sign all plans, calculations, and specifications for proposed site work, civil works, and related facilities requiring design review and inspection by the CBO. At a minimum, these include: grading; site preparation; excavation; compaction; and construction of secondary containment, foundations, erosion, and sedimentation control structures, drainage facilities, underground utilities, culverts, site access roads, and sanitary sewer systems;
- 3) Provide consultation to the RE during the construction phase of the project and recommend changes in the design of the civil works facilities and changes to the construction procedures;
- 4) Review, implement, and monitor storm water pollution prevention practices (SWPPP);
- 5) Review, implement, and monitor storm water management practices (SWMP);
- 6) Review, implement, and monitor drainage, erosion, sedimentation control programs (DESCP); and
- 7) Review, implement, and monitor all other civil engineering (earthwork) aspects of the project.

B) The soils engineer, geotechnical engineer, or civil engineer experienced and knowledgeable in the practice of soils engineering, shall:

- 1) Review all the engineering geology reports;
 - 2) Prepare the foundation investigations, geotechnical, or soils reports containing field exploration reports, laboratory tests, and engineering analysis detailing the nature and extent of the soils that could be susceptible to liquefaction, rapid settlement, or collapse when saturated under load;
 - 3) Be present, as required, during site grading and earthwork to provide consultation and monitor compliance with requirements set forth in the CBC (depending on the site conditions, this may be the responsibility of either the soils engineer, the engineering geologist, or both); and
 - 4) Recommend field changes to the civil engineer and RE.
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

- C) This engineer shall be authorized to halt earthwork and to require changes if site conditions are unsafe or do not conform to the predicted conditions used as the basis for design of earthwork or foundations.
- D) The engineering geologist shall:
 - 1) Review all the engineering geology reports and prepare a final soils grading report; and
 - 2) Be present, as required, during site grading and earthwork to provide consultation and monitor compliance with the requirements set forth in the CBC (depending on the site conditions, this may be the responsibility of either the soils engineer, the engineering geologist, or both).
- E) The design engineer shall:
 - 1) Be directly responsible for the design of the proposed structures and equipment supports;
 - 2) Provide consultation to the RE during design and construction of the project;
 - 3) Monitor construction progress to ensure compliance with engineering LORS;
 - 4) Evaluate and recommend necessary changes in design; and
 - 5) Prepare and sign all major building plans, specifications, and calculations.
- F) The mechanical engineer shall be responsible for, and sign and stamp a statement with, each mechanical submittal to the CBO stating that the proposed final design plans, specifications, and calculations conform to all of the mechanical engineering design requirements set forth in the Energy Commission's Decision.
- G) The electrical engineer shall:
 - 1) Be responsible for the electrical design of the project; and
 - 2) Sign and stamp electrical design drawings, plans, specifications, and calculations.

Verification: At least 30 days (or project owner and CBO approved alternative time frame) prior to the start of rough grading, the project owner shall submit to the CBO for review and approval resumes and registration numbers of the responsible civil engineer, soils (geotechnical) engineer, and engineering geologist assigned to the project.

At least 30 days (or project owner and CBO approved alternative time frame) prior to the start of construction, the project owner shall submit to the CBO, for review and approval, resumes and registration numbers of the responsible design engineer, mechanical engineer, and electrical engineer assigned to the project.

The project owner shall notify the CPM of the CBO's approvals of the responsible engineers within five days of the approval.

If the designated responsible engineer is subsequently reassigned or replaced, the project owner has five days in which to submit the resume and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer within five days of the approval.

GEN-6: Prior to the start of an activity requiring special inspection, including prefabricated assemblies, the project owner shall assign to the project qualified and certified special inspector(s) who shall be responsible for the special inspections required by the applicable edition of the CBC. All transmission facilities (lines, switchyards, switching stations, and substations) are addressed in Conditions of Certification in the Transmission System Engineering section of this Decision.

A certified welding inspector, certified by the American Welding Society (AWS) and/or American Society of Mechanical Engineers (ASME) as applicable, shall inspect welding performed on-site requiring special inspection (including structural, piping, tanks, and pressure vessels).

The special inspector shall:

- A) Be a qualified person who shall demonstrate competence, to the satisfaction of the CBO, for inspection of the particular type of construction requiring special or continuous
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure
<p>inspection;</p> <ul style="list-style-type: none"> B) Inspect the work assigned for conformance with the approved design drawings and specifications; C) Furnish inspection reports to the CBO and RE. All discrepancies shall be brought to the immediate attention of the RE for correction then, if uncorrected, to the CBO and the CPM for corrective action; and D) Submit a final signed report to the RE, CBO, and CPM stating whether the work requiring special inspection was, to the best of the inspector's knowledge, in conformance with the approved plans, specifications, and other provisions of the applicable edition of the CBC. <p>Verification: At least 15 days (or project owner and CBO approved alternative time frame) prior to the start of an activity requiring special inspection, the project owner shall submit to the CBO for review and approval, with a copy to the CPM, the name(s) and qualifications of the certified weld inspector(s) or other certified special inspector(s) assigned to the project to perform one or more of the duties set forth above. The project owner shall also submit to the CPM a copy of the CBO's approval of the qualifications of all special inspectors in the next monthly compliance report.</p> <p>If the special inspector is subsequently reassigned or replaced, the project owner has five days in which to submit the name and qualifications of the newly assigned special inspector to the CBO for approval. The project owner shall notify the CPM of the CBO's approval of the newly assigned inspector within five days of the approval.</p>
<p>GEN-7: If any discrepancy in design and/or construction is discovered in any engineering work that has undergone CBO design review and approval, the project owner shall document the discrepancy and recommend required corrective actions. The discrepancy documentation shall be submitted to the CBO for review and approval. The discrepancy documentation shall reference this Condition of Certification and, if appropriate, applicable sections of the CBC and/or other LORS.</p> <p>Verification: The project owner shall transmit a copy of the CBO's approval of any corrective action taken to resolve a discrepancy to the CPM in the next monthly compliance report. If any corrective action is disapproved, the project owner shall advise the CPM, within five days, of the reason for disapproval and the revised corrective action necessary to obtain the CBO's approval.</p>
<p>GEN-8: The project owner shall obtain the CBO's final approval of all completed work that has undergone CBO design review and approval. The project owner shall request that the CBO inspect the completed structure and review the submitted documents. The project owner shall notify the CPM after obtaining the CBO's final approval. The project owner shall retain one set of approved engineering plans, specifications, and calculations (including all approved changes) at the project site or at another accessible location during the operating life of the project. Electronic copies of the approved plans, specifications, calculations, and marked-up as-builts shall be provided to the CBO for retention by the CPM.</p> <p>Verification: Within 15 days of the completion of any work, the project owner shall submit to the CBO, with a copy to the CPM, in the next monthly compliance report: (a) a written notice that the completed work is ready for final inspection; and (b) a signed statement that the work conforms to the final approved plans. After storing the final approved engineering plans, specifications, and calculations described above, the project owner shall submit to the CPM a letter stating both that the above documents have been stored and the storage location of those documents.</p> <p>Within 90 days of the completion of construction, the project owner, at its own expense, shall provide to the CBO three sets of electronic copies of the above documents. These shall be provided in the form of "read only" (Adobe) files, with restricted (password-protected) printing privileges, on archive quality compact discs.</p>
<p>CIVIL ENGINEERING</p>
<p>CIVIL-1: The project owner shall submit to the CBO for review and approval the following:</p> <ul style="list-style-type: none"> A) Design of the proposed drainage structures and the grading plan; B) An erosion and sedimentation control plan; C) A storm water pollution prevention plan (SWPPP);

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

- D) Related calculations and specifications, signed and stamped by the responsible civil engineer; and
- E) Soils, geotechnical, or foundation investigations reports required by the CBC.

Verification: At least 30 days (or project owner and CBO approved alternative time frame) prior to the start of site grading, the project owner shall submit the documents described above to the CBO for design review and approval. In the next monthly compliance report following the CBO's approval, the project owner shall submit a written statement certifying that the documents have been approved by the CBO.

CIVIL-2: The resident engineer shall, if appropriate, stop all earthwork and construction in the affected areas when the responsible soils engineer, geotechnical engineer, or the civil engineer experienced and knowledgeable in the practice of soils engineering identifies unforeseen adverse soil or geologic conditions. The project owner shall submit modified plans, specifications, and calculations to the CBO based on these new conditions. The project owner shall obtain approval from the CBO before resuming earthwork and construction in the affected area.

Verification: The project owner shall notify the CPM, within 24 hours, when earthwork and construction are stopped as a result of unforeseen adverse geologic/soil conditions. Within 24 hours of the CBO's approval to resume earthwork and construction in the affected areas, the project owner shall provide to the CPM a copy of the CBO's approval.

CIVIL-3: The project owner shall perform inspections in accordance with the CBC. All plant site-grading operations, for which a grading permit is required, shall be subject to inspection by the CBO.

If, in the course of inspection, it is discovered that the work is not being performed in accordance with the approved plans, the discrepancies shall be reported immediately to the resident engineer, the CBO, and the CPM. The project owner shall prepare a written report, with copies to the CBO and the CPM, detailing all discrepancies, non-compliance items, and the proposed corrective action.

Verification: Within five days of the discovery of any discrepancies, the resident engineer shall transmit to the CBO and the CPM a non-conformance report (NCR) and the proposed corrective action for review and approval. Within five days of resolution of the NCR, the project owner shall submit the details of the corrective action to the CBO and the CPM. A list of NCRs for the reporting month shall also be included in the following monthly compliance report.

CIVIL-4: After completion of finished grading, erosion and sedimentation control, and drainage work, the project owner shall obtain the CBO's approval of the final grading plans (including final changes) for the erosion and sedimentation control work. The civil engineer shall state that the work within his/her area of responsibility was done in accordance with the final approved plans.

Verification: Within 30 days (or project owner and CBO approved alternative time frame) of the completion of the erosion and sediment control mitigation and drainage work, the project owner shall submit to the CBO, for review and approval, the final grading plans (including final changes) and the responsible civil engineer's signed statement that the installation of the facilities and all erosion control measures were completed in accordance with the final approved combined grading plans, and that the facilities are adequate for their intended purposes, along with a copy of the transmittal letter to the CPM. The project owner shall submit a copy of the CBO's approval to the CPM in the next monthly compliance report.

STRUCTURAL ENGINEERING

STRUC-1: Prior to the start of any increment of construction, the project owner shall submit plans, calculations, and other supporting documentation to the CBO for design review and acceptance for all project structures and equipment identified in the CBO-approved master drawing and master specifications list. The design plans and calculations shall include the lateral force procedures and details as well as vertical calculations.

Construction of any structure or component shall not begin until the CBO has approved the lateral force procedures to be employed in designing that structure or component.

The project owner shall:

- A) Obtain approval from the CBO of lateral force procedures proposed for project structures;
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

- B) Obtain approval from the CBO for the final design plans, specifications, calculations, soils reports, and applicable quality control procedures. If there are conflicting requirements, the more stringent shall govern (for example, highest loads, or lowest allowable stresses shall govern). All plans, calculations, and specifications for foundations that support structures shall be filed concurrently with the structure plans, calculations, and specifications;
- C) Submit to the CBO the required number of copies of the structural plans, specifications, calculations, and other required documents of the designated major structures prior to the start of on-site fabrication and installation of each structure, equipment support, or foundation;
- D) Ensure that the final plans, calculations, and specifications clearly reflect the inclusion of approved criteria, assumptions, and methods used to develop the design. The final designs, plans, calculations, and specifications shall be signed and stamped by the responsible design engineer; and

Submit to the CBO the responsible design engineer's signed statement that the final design plans conform to applicable LORS.

Verification: At least 60 days (or project owner and CBO approved alternative time frame) prior to the start of any increment of construction of any structure or component listed in the CBO-approved master drawing and master specifications list, the project owner shall submit to the CBO the above final design plans, specifications, and calculations, with a copy of the transmittal letter to the CPM.

The project owner shall submit to the CPM, in the next monthly compliance report, a copy of a statement from the CBO that the proposed structural plans, specifications, and calculations have been approved and comply with the requirements set forth in applicable engineering LORS.

STRUC-2: The project owner shall submit to the CBO the required number of sets of the following documents related to work that has undergone CBO design review and approval:

- A) Concrete cylinder strength test reports (including date of testing, date sample taken, design concrete strength, tested cylinder strength, age of test, type and size of sample, location and quantity of concrete placement from which sample was taken, and mix design designation and parameters);
- B) Concrete pour sign-off sheets;
- C) Bolt torque inspection reports (including location of test, date, bolt size, and recorded torques);
- D) Field weld inspection reports (including type of weld, location of weld, inspection of non-destructive testing (NDT) procedure and results, welder qualifications, certifications, qualified procedure description or number (ref: AWS); and
- E) Reports covering other structural activities requiring special inspections shall be in accordance with the CBC.

Verification: If a discrepancy is discovered in any of the above data, the project owner shall, within five days, prepare and submit an NCR describing the nature of the discrepancies and the proposed corrective action to the CBO, with a copy of the transmittal letter to the CPM. The NCR shall reference the Condition(s) of Certification and the applicable CBC chapter and section. Within five days of resolution of the NCR, the project owner shall submit a copy of the corrective action to the CBO and the CPM.

The project owner shall transmit a copy of the CBO's approval or disapproval of the corrective action to the CPM within 15 days. If disapproved, the project owner shall advise the CPM, within five days, of the reason for disapproval and the revised corrective action necessary to obtain the CBO's approval.

STRUC-3: The project owner shall submit to the CBO design changes to the final plans required by the CBC, including the revised drawings, specifications, calculations, and a complete description of and supporting rationale for the proposed changes, and shall give to the CBO prior notice of the intended filing.

Verification: On a schedule suitable to the CBO, the project owner shall notify the CBO of the intended filing of design changes, and shall submit the required number of sets of revised drawings and the required number of copies of the other above-mentioned documents to the CBO, with a copy of the transmittal letter to the CPM. The project owner shall notify the CPM, via the monthly compliance report, when the CBO has approved the revised plans.

STRUC-4: Tanks and vessels containing quantities of toxic or hazardous materials exceeding amounts specified in the CBC shall, at a minimum, be designed to comply with the requirements of that chapter.

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

Verification: At least 30 days (or project owner and CBO approved alternate time frame) prior to the start of installation of the tanks or vessels containing the above specified quantities of toxic or hazardous materials, the project owner shall submit to the CBO for design review and approval final design plans, specifications, and calculations, including a copy of the signed and stamped engineer's certification.

The project owner shall send copies of the CBO approvals of plan checks to the CPM in the following monthly compliance report. The project owner shall also transmit a copy of the CBO's inspection approvals to the CPM in the monthly compliance report following completion of any inspection.

MECHANICAL ENGINEERING

MECH-1 The project owner shall submit, for CBO design review and approval, the proposed final design, specifications, and calculations for each plant major piping and plumbing system listed in the CBO-approved master drawing and master specifications list. The submittal shall also include the applicable QA/QC procedures. Upon completion of construction of any such major piping or plumbing system, the project owner shall request the CBO's inspection approval of that construction.

The responsible mechanical engineer shall stamp and sign all plans, drawings, and calculations for the major piping and plumbing systems subject to CBO design review and approval, and submit a signed statement to the CBO when the piping and plumbing systems have been designed, fabricated, and installed in accordance with all of the applicable laws, ordinances, regulations and industry standards, which may include, but are not limited to:

- American National Standards Institute (ANSI) B31.1 (Power Piping Code);
- ANSI B31.2 (Fuel Gas Piping Code);
- ANSI B31.3 (Chemical Plant and Petroleum Refinery Piping Code);
- ANSI B31.8 (Gas Transmission and Distribution Piping Code);
- Title 24, California Code of Regulations, Part 5 (California Plumbing Code);
- Title 24, California Code of Regulations, Part 6 (California Energy Code for building energy conservation systems and temperature control and ventilation systems);
- Title 24, California Code of Regulations, Part 2 (California Building Code); and
- Riverside County codes.

The CBO may deputize inspectors to carry out the functions of the code enforcement agency.

Verification: At least 30 days (or project owner and CBO approved alternative time frame) prior to the start of any increment of major piping or plumbing construction listed in the CBO-approved master drawing and master specifications list, the project owner shall submit to the CBO for design review and approval the final plans, specifications, and calculations, including a copy of the signed and stamped statement from the responsible mechanical engineer certifying compliance with applicable LORS, and shall send the CPM a copy of the transmittal letter in the next monthly compliance report.

The project owner shall transmit to the CPM, in the monthly compliance report following completion of any inspection, a copy of the transmittal letter conveying the CBO's inspection approvals.

MECH-2: For all pressure vessels installed in the plant, the project owner shall submit to the CBO and California Occupational Safety and Health Administration (Cal-OSHA), prior to operation, the code certification papers and other documents required by applicable LORS. Upon completion of the installation of any pressure vessel, the project owner shall request the appropriate CBO and/or Cal-OSHA inspection of that installation.

The project owner shall:

- A) Ensure that all boilers and fired and unfired pressure vessels are designed, fabricated, and installed in accordance with the appropriate section of the American Society of
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

Mechanical Engineers (ASME) Boiler and Pressure Vessel Code or other applicable code. Vendor certification, with identification of applicable code, shall be submitted for prefabricated vessels and tanks; and

- B) Have the responsible design engineer submit a statement to the CBO that the proposed final design plans, specifications, and calculations conform to all of the requirements set forth in the appropriate ASME Boiler and Pressure Vessel Code or other applicable codes.

Verification: At least 30 days (or project owner and CBO approved alternative time frame) prior to the start of on-site fabrication or installation of any pressure vessel, the project owner shall submit to the CBO for design review and approval the above listed documents, including a copy of the signed and stamped engineer's certification, with a copy of the transmittal letter to the CPM.

The project owner shall transmit to the CPM, in the monthly compliance report following completion of any inspection, a copy of the transmittal letter conveying the CBO's and/or Cal-OSHA inspection approvals.

MECH-3: The project owner shall submit to the CBO for design review and approval the design plans, specifications, calculations, and quality control procedures for any heating, ventilating, air conditioning (HVAC) or refrigeration system. Packaged HVAC systems, where used, shall be identified with the appropriate manufacturer's data sheets.

The project owner shall design and install all HVAC and refrigeration systems within buildings and related structures in accordance with the CBC and other applicable codes. Upon completion of any increment of construction, the project owner shall request the CBO's inspection and approval of that construction. The final plans, specifications, and calculations shall include approved criteria, assumptions, and methods used to develop the design. In addition, the responsible mechanical engineer shall sign and stamp all plans, drawings, and calculations and submit a signed statement to the CBO that the proposed final design plans, specifications, and calculations conform with the applicable LORS.

Verification: At least 30 days (or project owner and CBO approved alternative time frame) prior to the start of construction of any HVAC or refrigeration system, the project owner shall submit to the CBO the required HVAC and refrigeration calculations, plans, and specifications, including a copy of the signed and stamped statement from the responsible mechanical engineer certifying compliance with the CBC and other applicable codes, with a copy of the transmittal letter to the CPM.

ELECTRICAL ENGINEERING

ELEC-1: Prior to the start of any increment of electrical construction for all electrical equipment and systems 480 Volts or higher (see a representative list, below), with the exception of underground duct work and any physical layout drawings and drawings not related to code compliance and life safety, the project owner shall submit for CBO design review and approval the proposed final design, specifications, and calculations. Upon approval, the above listed plans, together with design changes and design change notices, shall remain on the site or at another accessible location for the operating life of the project. The project owner shall request that the CBO inspect the installation to ensure compliance with the requirements of applicable LORS. All transmission facilities (lines, switchyards, switching stations, and substations) are addressed in Conditions of Certification in the Transmission System Engineering section of this Decision.

- A) Final plant design plans shall include:
- 1) one-line diagrams for the 13.8 kV, 4.16 kV, and 480 V systems; and
 - 2) system grounding drawings.
- B) Final plant calculations must establish:
- 1) short-circuit ratings of plant equipment;
 - 2) ampacity of feeder cables;
 - 3) voltage drop in feeder cables;
 - 4) system grounding requirements;
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

- 5) coordination study calculations for fuses, circuit breakers, and protective relay settings for the 13.8 kV, 4.16 kV, and 480 V systems;
- 6) system grounding requirements; and
- 7) lighting energy calculations.
- C) The following activities shall be reported to the CPM in the monthly compliance report:
 - 1) Receipt or delay of major electrical equipment;
 - 2) Testing or energization of major electrical equipment; and
 - 3) A signed statement by the registered electrical engineer certifying that the proposed final design plans and specifications conform to requirements set forth in the Energy Commission Decision.

Verification: At least 30 days (or project owner and CBO approved alternative time frame) prior to the start of each increment of electrical construction, the project owner shall submit to the CBO for design review and approval the above listed documents. The project owner shall include in this submittal a copy of the signed and stamped statement from the responsible electrical engineer attesting compliance with the applicable LORS, and shall send the CPM a copy of the transmittal letter in the next monthly compliance report.

TSE

TSE-1: The project owner shall furnish to the CPM and to the CBO a schedule of transmission facility design submittals, a Master Drawing List, a Master Specifications List, and a Major Equipment and Structure List. The schedule shall contain a description and list of proposed submittal packages for design, calculations, and specifications for major structures and equipment. To facilitate audits by Energy Commission staff, the project owner shall provide designated packages to the CPM when requested.

Verification: At least 60 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of construction, the project owner shall submit the schedule, a Master Drawing List, and a Master Specifications List to the CBO and to the CPM. The schedule shall contain a description and list of proposed submittal packages for design, calculations, and specifications for major structures and equipment (see a list of major equipment in Table 1: Major Equipment List below). Additions and deletions shall be made to the table only with CPM and CBO approval. The project owner shall provide schedule updates in the Monthly Compliance Report.

TABLE 1
MAJOR EQUIPMENT LIST

Breakers	Take off Facilities
Step-up Transformer	Electrical Control Building
Switchyard	Switchyard Control Building
Busses	Transmission Pole/Tower
Surge Arrestors	Insulators and Conductors
Disconnects and Wave Traps	Grounding System

TSE-2: Prior to the start of construction the project owner shall assign an electrical engineer and at least one of each of the following to the project:

- A) a civil engineer;
- B) a geotechnical engineer or a civil engineer experienced and knowledgeable in the practice of soils engineering;

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

- C) a design engineer, who is either a structural engineer or a civil engineer fully competent and proficient in the design of power plant structures and equipment supports; or
- D) a mechanical engineer.

(Business and Professions Code Sections 6704 et seq. require state registration to practice as a civil engineer or structural engineer in California.)

The tasks performed by the civil, mechanical, electrical or design engineers may be divided between two or more engineers, as long as each engineer is responsible for a particular segment of the project (e.g., proposed earthwork, civil structures, power plant structures, equipment support). No segment of the project shall have more than one responsible engineer. The transmission line may be the responsibility of a separate California registered electrical engineer. The civil, geotechnical or civil and design engineer assigned in conformance with Facility Design condition GEN-5, may be responsible for design and review of the TSE facilities.

The project owner shall submit to the CBO for review and approval, the names, qualifications and registration numbers of all engineers assigned to the project. If any one of the designated engineers is subsequently reassigned or replaced, the project owner shall submit the name, qualifications and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer. This engineer shall be authorized to halt earthwork and to require changes if site conditions are unsafe or do not conform with predicted conditions used as a basis for design of earthwork or foundations.

The electrical engineer shall:

- A) Be responsible for the electrical design of the power plant switchyard, outlet and termination facilities; and
- B) Sign and stamp electrical design drawings, plans, specifications, and calculations.

Verification: At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of rough grading, the project owner shall submit to the CBO for review and approval, the names, qualifications and registration numbers of all the responsible engineers assigned to the project. The project owner shall notify the CPM of the CBO's approvals of the engineers within five days of the approval.

If the designated responsible engineer is subsequently reassigned or replaced, the project owner has five days in which to submit the name, qualifications, and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer within five days of the approval.

TSE-3: If any discrepancy in design and/or construction is discovered in any engineering work that has undergone CBO design review and approval, the project owner shall document the discrepancy and recommend corrective action (1998 CBC, Chapter 1, Section 108.4, Approval Required; Chapter 17, Section 1701.3, Duties and Responsibilities of the Special Inspector; Appendix Chapter 33, Section 3317.7, Notification of Noncompliance). The discrepancy documentation shall become a controlled document and shall be submitted to the CBO for review and approval and shall reference this condition of certification.

Verification: The project owner shall submit a copy of the CBO's approval or disapproval of any corrective action taken to resolve a discrepancy to the CPM within 15 days of receipt. If disapproved, the project owner shall advise the CPM, within five days, the reason for disapproval, and the revised corrective action required to obtain the CBO's approval.

TSE-4: For the power plant switchyard, outlet line and termination, the project owner shall not begin any increment of construction until plans for that increment have been approved by the CBO. These plans, together with design changes and design change notices, shall remain on the site for one year after completion of construction. The project owner shall request that the CBO inspect the installation to ensure compliance with the requirements of applicable LORS. The following activities shall be reported in the Monthly Compliance Report:

- A) Receipt or delay of major electrical equipment;
- B) Testing or energization of major electrical equipment; and
- C) The number of electrical drawings approved, submitted for approval, and still to be submitted.

Verification: At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of each increment of construction, the project owner shall submit to the CBO for review and approval the final design plans, specifications and calculations for equipment and systems of the power plant switchyard, outlet line and termination, including a copy of the signed and stamped statement from the responsible electrical engineer attesting to compliance with the applicable LORS, and send the CPM a

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

copy of the transmittal letter in the next Monthly Compliance Report.

TSE-5: The project owner shall ensure that the design, construction and operation of the proposed transmission facilities will conform to all applicable LORS, including the requirements listed below. The project owner shall submit the required number of copies of the design drawings and calculations to the CBO as determined by the CBO.

- A) The power plant switchyard and outlet line shall meet or exceed the electrical, mechanical, civil and structural requirements of CPUC General Order 95 or National Electric Safety Code (NESC), Title 8 of the California Code and Regulations (Title 8), Articles 35, 36 and 37 of the High Voltage Electric Safety Orders, California ISO standards, National Electric Code (NEC) and related industry standards.
- B) Breakers and busses in the power plant switchyard and other switchyards, where applicable, shall be sized to accommodate full output from the project and to comply with a short-circuit analysis.
- C) Outlet line crossings and line parallels with transmission and distribution facilities shall be coordinated with the transmission line owner and comply with the owner's standards.
- D) The project conductors shall be sized to accommodate the full output from the project.
- E) Termination facilities shall comply with applicable Western interconnection standards.
- F) The project owner shall provide to the CPM:
 - 1) The Special Protection System (SPS) sequencing and timing if applicable,
 - 2) The Facilities study report performed by Western.
 - 3) A mitigation plan for potential overloads in the SCE and IID systems identified in the Western SIS as approved by Western through the process that involves all stakeholders (Western, California ISO, SCE, IID and MWD) and agreed to by the project owner.
 - 4) An Operational study report or procedures from Western based on the expected or current RSEP Commercial Operation Date (COD).
 - 5) A copy of the executed LGIA signed by Western and the project owner.

Verification: At least 60 days prior to the start of construction of transmission facilities (or a lesser number of days mutually agreed to by the project owner and CBO), the project owner shall submit to the CBO for approval:

- A) Design drawings, specifications and calculations conforming with CPUC General Order 95 or NESC, Title 8, Articles 35, 36 and 37 of the High Voltage Electric Safety Orders, NEC, applicable interconnection standards and related industry standards, for the poles/towers, foundations, anchor bolts, conductors, grounding systems and major switchyard equipment.
 - B) For each element of the transmission facilities identified above, the submittal package to the CBO shall contain the design criteria, a discussion of the calculation method(s), a sample calculation based on "worst case conditions"¹ and a statement signed and sealed by the registered engineer in responsible charge, or other acceptable alternative verification, that the transmission element(s) will conform with CPUC General Order 95 or NESC, Title 8, California Code of Regulations, Articles 35, 36 and 37 of the, High Voltage Electric Safety Orders, NEC, applicable interconnection standards, and related industry standards.
 - C) Electrical one-line diagrams signed and sealed by the registered professional electrical engineer in responsible charge, a route map, and an engineering description of equipment and the configurations covered by requirements TSE-5 a) through f) above.
 - D) The Special Protection System (SPS) sequencing and timing if applicable shall be provided concurrently to the CPM.
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¹ Worst case conditions for the foundations would include, for instance, a dead-end or angle pole.

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure
<p>E) A mitigation plan for potential overloads in the SCE and IID systems identified in the Western SIS as approved by Western through the process that involves all stakeholders (Western, California ISO, SCE, IID and MWD) and as agreed by the project owner.</p> <p>F) The Facilities study report performed by Western.</p> <p>G) An Operational study report or procedures from Western based on the expected or current RSEP COD.</p> <p>H) A copy of the executed LGIA signed by Western and the project owner.</p>
<p>TSE-6: The project owner shall inform the CPM and CBO of any impending changes that may not conform to requirements TSE-5 a) through f), and have not received CPM and CBO approval, and request approval to implement such changes. A detailed description of the proposed change and complete engineering, environmental, and economic rationale for the change shall accompany the request. Construction involving changed equipment or substation configurations shall not begin without prior written approval of the changes by the CBO and the CPM.</p> <p>Verification: At least 60 days prior to the construction of transmission facilities, the project owner shall inform the CBO and the CPM of any impending changes that may not conform to requirements of TSE-5 and request approval to implement such changes.</p>
<p>TSE-7: The project owner shall provide the following Notice to Western prior to synchronizing the facility with the Western DSW Transmission system:</p> <p>A) At least one week prior to synchronizing the facility with the grid for testing, provide Western a letter stating the proposed date of synchronization; and</p> <p>B) At least one business day prior to synchronizing the facility with the grid for testing, provide telephone notification to the Western Outage Coordination Department.</p> <p>Verification: The project owner shall provide copies of the Western letter to the CPM when it is sent to Western one week prior to initial synchronization with the grid. The project owner shall contact the Western Outage Coordination Department, Monday through Friday, between the hours of 0700 and 1530 at least one business day prior to synchronizing the facility with the grid for testing. A report of conversation with Western shall be provided electronically to the CPM one day before synchronizing the facility with the Western DSW transmission system for the first time.</p>
<p>TSE-8: The project owner shall be responsible for the inspection of the transmission facilities during and after project construction, and any subsequent CPM and CBO approved changes thereto, to ensure conformance with CPUC GO-95 or NESC, Title 8, CCR, Articles 35, 36 and 37 of the High Voltage Electric Safety Orders, applicable interconnection standards, NEC and related industry standards. In case of non-conformance, the project owner shall inform the CPM and CBO in writing, within 10 days of discovering such non-conformance and describe the corrective actions to be taken.</p> <p>Verification: Within 60 days after first synchronization of the project, the project owner shall transmit to the CPM and CBO:</p> <p>A) "As built" engineering description(s) and one-line drawings of the electrical portion of the facilities signed and sealed by the registered electrical engineer in responsible charge. A statement attesting to conformance with CPUC GO-95 or NESC, Title 8, California Code of Regulations, Articles 35, 36 and 37 of the High Voltage Electric Safety Orders, and applicable interconnection standards, NEC, related industry standards, and these conditions shall be provided concurrently.</p> <p>B) An "as built" engineering description of the mechanical, structural, and civil portion of the transmission facilities signed and sealed by the registered engineer in responsible charge or acceptable alternative verification. "As built" drawings of the electrical, mechanical, structural, and civil portion of the transmission facilities shall be maintained at the power plant and made available, if requested, for CPM audit as set forth in the "Compliance Monitoring Plan".</p> <p>C) A summary of inspections of the completed transmission facilities, and identification of any nonconforming work and corrective actions taken, signed and sealed by the registered engineer in charge.</p>
TLSN
<p>TLSN-1: The project owner shall construct the extension of the existing 12-kV distribution line according to the requirements of California Public Utility Commission's GO-95, GO-52,</p>

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

GO-131-D, Title 8, and Group 2, High Voltage Electrical Safety Orders, sections 2700 through 2974 of the California Code of Regulations, and SCE's EMF reduction guidelines. The project owner shall construct the proposed 161/230 kV generation tie line according to Western's EMF reduction guidelines.

Verification: At least 30 days before starting construction of the transmission lines or related structures and facilities, the project owner shall submit to the Compliance Project Manager (CPM) a letter signed by a California-registered electrical engineer affirming that the lines will be constructed according to the requirements stated in the Condition.

TLSN-2: The project owner shall use a qualified individual to measure the strengths of the electric and magnetic fields at the points of maximum intensity along the generation tie line and distribution line routes. The measurements shall be made before and after energization according to the American National Standard Institute/Institute of Electrical and Electronic Engineers (ANSI/IEEE) standard procedures. These measurements shall be completed no later than 6 months after the start of operations.

Verification: The project owner shall file copies of the pre-and post-energization measurements with the CPM within 60 days after completion of the measurements.

TLSN-3: The project owner shall ensure that the rights-of-way of the generation tie line and the distribution line are kept free of combustible material, as required under the provisions of section 4292 of the Public Resources Code and section 1250 of Title 14 of the California Code of Regulations.

Verification: During the first 5 years of plant operation, the project owner shall provide a summary of inspection results and any fire prevention activities carried out along the rights-of-way and provide such summaries in the Annual Compliance Report on transmission line safety and nuisance-related requirements.

TLSN-4: The project owner shall ensure that all permanent metallic objects within the rights-of-way of the project-related lines are grounded according to industry standards regardless of ownership.

Verification: At least 30 days before the lines are energized, the project owner shall transmit to the CPM a letter confirming compliance with this Condition.

AIR QUALITY

AQ-SC1: Air Quality Construction Mitigation Manager (AQCMM): The project owner shall designate and retain an on-site AQCMM who shall be responsible for directing and documenting compliance with Conditions of Certification AQ-SC3, AQ-SC4 and AQ-SC5 for the entire project site and linear facility construction. The on-site AQCMM may delegate responsibilities to one or more AQCMM Delegates. The AQCMM and AQCMM Delegates shall have full access to all areas of construction on the project site and linear facilities, and shall have the authority to stop any or all construction activities as warranted by applicable construction mitigation conditions. The AQCMM and AQCMM Delegates may have other responsibilities in addition to those described in this Condition. The AQCMM shall not be terminated without written consent of the Compliance Project Manager (CPM).

Verification: At least 30 days prior to the start of ground disturbance, the project owner shall submit to the CPM for approval, the name, resume, qualifications, and contact information for the on-site AQCMM and all AQCMM Delegates.

AQ-SC2: Air Quality Construction Mitigation Plan (AQCMP): The project owner shall provide an AQCMP, for approval, which details the steps that will be taken and the reporting requirements necessary to ensure compliance with Conditions of Certification AQ-SC3, AQ-SC4, and AQ-SC5.

Verification: At least 30 days prior to the start of any ground disturbance, the project owner shall submit the AQCMP to the CPM for approval. The AQCMP shall include effectiveness and environmental data for the proposed soil stabilizer. The CPM will notify the project owner of any necessary modifications to the plan within 15 days from the date of receipt.

AQ-SC3: Construction Fugitive Dust Control: The AQCMM shall submit documentation to the CPM in each Monthly Compliance Report that demonstrates compliance with the Air Quality Construction Mitigation Plan (AQCMP) mitigation measures for the purposes of minimizing fugitive dust emission creation from construction activities and preventing all fugitive dust plumes that would not comply with the performance conditions identified in AQ-SC4 from leaving the project site. The following fugitive dust mitigation measures shall be included in the Air Quality Construction Mitigation Plan (AQCMP) required by AQ-SC2, and any deviation from the following mitigation measures shall require prior CPM notification and approval.

- A) The main access roads through the facility to the power block areas will be either paved or stabilized using soil binders, or equivalent methods, to provide a stabilized surface that is similar for the purposes of dust control to paving, that may or may not include a crushed rock (gravel or similar material with fines removed) top layer, prior to initiating construction in the main power block area, and delivery areas for operations materials (chemicals, replacement parts, etc.) will be paved or treated prior to taking
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure
initial deliveries.
<p>B) All unpaved construction roads and unpaved operation and maintenance site roads, as they are being constructed, shall be stabilized with a non-toxic soil stabilizer or soil weighting agent that can be determined to be both as efficient or more efficient for fugitive dust control as ARB approved soil stabilizers, and shall not increase any other environmental impacts including loss of vegetation to areas beyond where the soil stabilizers are being applied for dust control. All other disturbed areas in the project and linear construction sites shall be watered as frequently as necessary during grading (consistent with Biology Conditions of Certification that address the minimization of standing water); and after active construction activities shall be stabilized with a non-toxic soil stabilizer or soil weighting agent, or alternative approved soil stabilizing methods, in order to comply with the dust mitigation objectives of Condition of Certification AQ-SC4. The frequency of watering can be reduced or eliminated during periods of precipitation.</p> <p>C) No vehicle shall exceed 10 miles per hour on unpaved areas within the construction site, with the exception that vehicles may travel up to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions.</p> <p>D) Visible speed limit signs shall be posted at the construction site entrances.</p> <p>E) All construction equipment vehicle tires shall be inspected and washed as necessary to be cleaned free of dirt prior to entering paved roadways.</p> <p>F) Gravel or paved ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.</p> <p>G) All unpaved exits from the construction site shall be graveled or treated to prevent track-out to public roadways.</p> <p>H) All construction vehicles shall enter the construction site through the treated entrance roadways, unless an alternative route has been submitted to and approved by the CPM.</p> <p>I) Construction areas adjacent to any paved roadway below the grade of the surrounding construction area or otherwise directly impacted by sediment from site drainage shall be provided with sandbags or other equivalently effective measures to prevent run-off to roadways, or other similar run-off control measures as specified in the Storm Water Pollution Prevention Plan (SWPPP), only when such SWPPP measures are necessary so that this condition does not conflict with the requirements of the SWPPP.</p> <p>J) All paved roads within the construction site shall be swept daily or as needed (less during periods of precipitation) on days when construction activity occurs to prevent the accumulation of dirt and debris.</p> <p>K) At least the first 500 feet of any paved public roadway exiting the construction site or exiting other unpaved roads en route from the construction site or construction staging areas shall be swept as needed (less during periods of precipitation) on days when construction activity occurs or on any other day when dirt or runoff resulting from the construction site activities is visible on the public paved roadways.</p> <p>L) All soil storage piles and disturbed areas that remain inactive for longer than 10 days shall be covered, or shall be treated with appropriate dust suppressant compounds.</p> <p>M) All vehicles that are used to transport solid bulk material on public roadways and that have potential to cause visible emissions shall be provided with a cover, or the materials shall be sufficiently wetted and loaded onto the trucks in a manner to provide at least two feet of freeboard.</p> <p>N) Wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) shall be used on all construction areas that may be disturbed. Any windbreaks installed to comply with this Condition shall remain in place until the soil is stabilized or permanently covered with vegetation.</p>
<p>Verification: The AQCMM shall provide the CPM a Monthly Compliance Report to include the following to demonstrate control of fugitive dust emissions:</p>
<p>A) a summary of all actions taken to maintain compliance with this Condition;</p> <p>B) copies of any complaints filed with the District in relation to project construction; and</p> <p>C) C. any other documentation deemed necessary by the CPM or AQCMM to verify compliance with this Condition. Such information may be provided via electronic format or</p>

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

disk at the project owner's discretion.

AQ-SC4 Dust Plume Response Requirement: The AQCMM or an AQCMM Delegate shall monitor all construction activities for visible dust plumes. Observations of visible dust plumes that have the potential to be transported (A) off the project site and within 400 feet upwind of any regularly occupied structures not owned by the project owner or (B) 200 feet beyond the centerline of the construction of linear facilities indicate that existing mitigation measures are not resulting in effective mitigation. The AQCMP shall include a section detailing how the additional mitigation measures will be accomplished within the time limits specified. The AQCMM or Delegate shall implement the following procedures for additional mitigation measures in the event that such visible dust plumes are observed:

Step 1: The AQCMM or Delegate shall direct more intensive application of the existing mitigation methods within 15 minutes of making such a determination.

Step 2: The AQCMM or Delegate shall direct implementation of additional methods of dust suppression if Step 1, specified above, fails to result in adequate mitigation within 30 minutes of the original determination.

Step 3: The AQCMM or Delegate shall direct a temporary shutdown of the activity causing the emissions if Step 2, specified above, fails to result in effective mitigation within one hour of the original determination. The activity shall not restart until the AQCMM or Delegate is satisfied that appropriate additional mitigation or other site conditions have changed so that visual dust plumes will not result upon restarting the shutdown source. The owner/operator may appeal to the CPM any directive from the AQCMM or Delegate to shut down an activity, if the shutdown shall go into effect within one hour of the original determination, unless overruled by the CPM before that time.

Verification: The AQCMM shall provide the CPM a Monthly Compliance Report to include:

- A) A summary of all actions taken to maintain compliance with this Condition;
 - B) Copies of any complaints filed with the District in relation to project construction; and
 - C) Any other documentation deemed necessary by the CPM or AQCMM to verify compliance with this Condition. Such information may be provided via electronic format or disk at the project owner's discretion.
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AQ-SC5 Diesel-Fueled Engine Control: The AQCMM shall submit to the CPM, in the Monthly Compliance Report, a construction mitigation report that demonstrates compliance with the AQCMP mitigation measures for purposes of controlling diesel construction-related emissions. The following off-road diesel construction equipment mitigation measures shall be included in the Air Quality Construction Mitigation Plan (AQCMP) required by AQ-SC2, and any deviation from the following mitigation measures shall require prior CPM notification and approval.

- A) All diesel-fueled engines used in the construction of the facility shall have clearly visible tags issued by the on-site AQCMM showing that the engine meets the Conditions set forth herein.
 - B) All construction diesel engines with a rating of 50 hp or higher shall meet, at a minimum, the Tier 3 California Emission Standards for Off-Road Compression-Ignition Engines, as specified in California Code of Regulations, Title 13, section 2423(b)(1), unless a good faith effort to the satisfaction of the CPM that is certified by the on-site AQCMM demonstrates that such engine is not available for a particular item of equipment. In the event that a Tier 3 engine is not available for any off-road equipment larger than 50 hp, that equipment shall be equipped with a Tier 2 engine, or an engine that is equipped with retrofit controls to reduce exhaust emissions of nitrogen oxides (NOX) and diesel particulate matter (DPM) to no more than Tier 2 levels unless certified by engine manufacturers or the on-site AQCMM that the use of such devices is not practical for specific engine types. For purposes of this Condition, the use of such devices is "not practical" for the following, as well as other, reasons.
 - 1) There is no available retrofit control device that has been verified by either the California Air Resources Board or U.S. Environmental Protection Agency to control the engine in question to Tier 2 equivalent emission levels and the highest level of available control using retrofit or Tier 1 engines is being used for the engine in question; or
 - 2) The construction equipment is intended to be on site for 10 days or less.
 - 3) The CPM may grant relief from this requirement if the AQCMM can demonstrate a good faith effort to comply with this requirement and that compliance is not practical.
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

- C) The use of a retrofit control device may be terminated immediately, provided that the CPM is informed within 10 working days of the termination and that a replacement for the equipment item in question meeting the controls required in item "b" occurs within 10 days of termination of the use, if the equipment would be needed to continue working at this site for more than 15 days after the use of the retrofit control device is terminated, if one of the following conditions exists :
 - 1) The use of the retrofit control device is excessively reducing the normal availability of the construction equipment due to increased down time for maintenance, and/or reduced power output due to an excessive increase in back pressure.
 - 2) The retrofit control device is causing or is reasonably expected to cause engine damage.
 - 3) The retrofit control device is causing or is reasonably expected to cause a substantial risk to workers or the public.
 - 4) Any other seriously detrimental cause which has the approval of the CPM prior to implementation of the termination.
- D) All heavy earth-moving equipment and heavy-duty construction-related trucks with engines meeting the requirements of (b) above shall be properly maintained and the engines tuned to the engine manufacturer's specifications.
- E) All diesel heavy construction equipment shall not idle for more than five minutes. Vehicles that need to idle as part of their normal operation (such as concrete trucks) are exempted from this requirement.
- F) Construction equipment will employ electric motors when feasible.

Verification: The AQCM shall include in the Monthly Compliance Report the following to demonstrate control of diesel construction-related emissions:

- A) A summary of all actions taken to control diesel construction-related emissions;
- B) A list of all heavy equipment used on site during that month, including the owner of that equipment and a letter from each owner indicating that equipment has been properly maintained; and
- C) Any other documentation deemed necessary by the CPM or AQCM to verify compliance with this Condition. Such information may be provided via electronic format or disk at the project owner's discretion.

AQ-SC6: The project owner, when obtaining dedicated on-road or off-road vehicles for mirror washing activities and other facility maintenance activities, shall only obtain vehicles that meet California on-road vehicle emission standards or appropriate U.S.EPA/California off-road engine emission standards for the latest model year available when obtained.

Verification: At least 30 days prior to the start of commercial operation, the project owner shall submit to the CPM a copy of the plan that identifies the size and type of the on-site vehicle and equipment fleet and the vehicle and equipment purchase orders and contracts and/or purchase schedule. The plan shall be updated every other year and submitted in the Annual Compliance Report.

AQ-SC7: The project owner shall provide a site Operations Dust Control Plan, including all applicable fugitive dust control measures identified in the Condition AQ-SC3 that would be applicable to minimizing fugitive dust emission creation from operation and maintenance activities and preventing all fugitive dust plumes that would not comply with the performance standards identified in AQ-SC4 from leaving the project site; that:

- A) describes the active operations and wind erosion control techniques such as windbreaks and chemical dust suppressants, including their ongoing maintenance procedures, that shall be used on areas that could be disturbed by vehicles or wind anywhere within the project boundaries; and
- B) identifies the location of signs throughout the facility that will limit traveling on unpaved portion of roadways to solar equipment maintenance vehicles only. In addition, vehicle speed shall be limited to no more than 10 miles per hour on these unpaved roadways, with the exception that vehicles may travel up to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions.

The site Operations Fugitive Dust Control Plan shall include the use of durable non-toxic soil stabilizers on all regularly used unpaved roads and disturbed off-road areas, or alternative

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

methods for stabilizing disturbed off-road areas, within the project boundaries, and shall include the inspection and maintenance procedures that will be undertaken to ensure that the unpaved roads remain stabilized. The soil stabilizer used shall be a non-toxic soil stabilizer or soil weighting agent that can be determined to be both as efficient, or more efficient for fugitive dust control as ARB-approved soil stabilizers, and shall not increase any other environmental impacts including loss of vegetation to areas beyond where the soil stabilizers are being applied for dust control.

The performance and application of the fugitive dust controls shall also be measured against and meet the performance requirements of Condition AQ-SC4. The measures and performance requirements of AQ-SC4 shall also be included in the operations dust control plan.

Verification: At least 30 days prior to start of commercial operation, the project owner shall submit to the CPM for review and approval a copy of the site Operations Dust Control Plan that identifies the dust and erosion control procedures, including effectiveness and environmental data for the proposed soil stabilizer, that will be used during operation of the project and that identifies all locations of the speed limit signs.

Within 60 days after commercial operation, the project owner shall provide to the CPM a report identifying the locations of all speed limit signs, and a copy of the project employee and contractor training manual that clearly identifies that project employees and contractors are required to comply with the dust and erosion control procedures and on-site speed limits.

AQ-SC8: The project owner shall provide the CPM copies of all District issued Authority-to-Construct (ATC) and Permit-to-Operate (PTO) documents for the facility.

The project owner shall submit to the CPM for review and approval any modification proposed by the project owner to any project federal air permit. The project owner shall submit to the CPM any modification to any federal air permit proposed by the District or U.S. Environmental Protection Agency (U.S. EPA), and any revised federal air permit issued by the District or U.S. EPA, for the project.

Verification: The project owner shall submit any ATC, PTO, and proposed federal air permit modifications to the CPM within five working days of its submittal either by 1) the project owner to an agency, or 2) receipt of proposed modifications from an agency. The project owner shall submit all modified ATC/PTO documents and all federal air permits to the CPM within 15 days of receipt.

AQ-SC9: The project owner shall perform source testing on the two molten salt tanks, at the vents, within the tank headspace or at other locations to be determined, within one year of the start of commercial operation to confirm that the emissions of NO_x from salt decomposition and particulate salt fume emissions from these tanks are negligible (defined for the purposes of this Condition as, for each pollutant, less than 0.1 lbs/day, or the detection limits of the approved source test methodologies if higher). In the event that the source tests establish that the emissions of either or both of these pollutants are not negligible then the Applicant shall establish emission factors for use to determine annual emissions that shall be reported in the annual compliance reports.

Verification: The project owner shall submit a molten salt tank NO_x and particulate source test plan for review and approval to the CPM at least 60 days prior to conducting the source tests. The source testing plan shall rely, to the extent practical, on existing USEPA/CARB source test methods and shall include the following information:

- A) The proposed source test methods and their technical descriptions and proposed source sampling locations.
- B) The proposed facility operating parameters and time of day for the tests. These source tests should be performed during periods of maximum tank venting emissions potential.
- C) The proposed operating parameter (heat input, tank temperature, salt pumping rates, etc.) recordkeeping that will accompany the source test data.

The project owner shall provide the source test report as well as any determined salt tank emission factors to the CPM for review and approval within 60 days of the completion of the source tests.

WORKER SAFETY

WORKER SAFETY-1: The project owner shall submit to the Compliance Project Manager (CPM) a copy of the Project Construction Safety and Health Program containing the following:

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

- A) Construction Personal Protective Equipment Program;
- B) Construction Exposure Monitoring Program;
- C) Construction Injury and Illness Prevention Program;
- D) Construction Heat Stress Protection Plan that implements and expands on existing Cal OSHA regulations as found in 8 CCR 3395;
- E) Construction Emergency Action Plan; and
- F) Construction Fire Prevention Plan that includes the above-ground fuel depot.

The Personal Protective Equipment Program, the Exposure Monitoring Program, the Injury and Illness Prevention Program, and the Heat Stress Protection Plan shall be submitted to the CPM for review and approval concerning compliance of the program with all applicable safety orders. The Construction Emergency Action Plan and the Fire Prevention Plan shall be submitted to the Riverside County Fire Department for review and comment prior to submittal to the CPM for approval.

Verification: At least 30 days prior to the start of construction, the project owner shall submit to the CPM for review and approval a copy of the Project Construction Safety and Health Program.

WORKER SAFETY-2: The project owner shall submit to the CPM a copy of the Project Operations and Maintenance Safety and Health Program containing the following: an Operation Injury and Illness Prevention Plan;

- A) Operation Heat Stress Protection Plan that implements and expands on existing Cal OSHA regulations (8 CCR 3395);
- B) Best Management Practices (BMP) for the storage and application of herbicides;
- C) Emergency Action Plan;
- D) Hazardous Materials Management Program;
- E) Fire Prevention Plan that includes the fuel depot should the project owner elect to maintain and operate the fuel depot during operations (8 Cal Code Regs. § 3221); and
- F) Personal Protective Equipment Program (8 Cal Code Regs. §§ 3401—3411).

The Operation Injury and Illness Prevention Plan, Heat Stress Protection Plan, BMP for Herbicides, and Personal Protective Equipment, and Personal Protective Equipment Program shall be submitted to the CPM for review and comment concerning compliance of the programs with all applicable safety orders. The Fire Prevention Plan and the Emergency Action Plan shall also be submitted to the Riverside County Fire Department for review and comment.

Verification: At least 30 days prior to commercial operation, the project owner shall submit to the CPM for approval a copy of the Project Operations and Maintenance Safety and Health Program.

WORKER SAFETY-3: The project owner shall provide a site Construction Safety Supervisor (CSS) who, by way of training and/or experience, is knowledgeable of power plant construction activities and relevant laws, ordinances, regulations, and standards; is capable of identifying workplace hazards relating to the construction activities; and has authority to take appropriate action to assure compliance and mitigate hazards. The CSS shall:

- A) Have overall authority for coordination and implementation of all occupational safety and health practices, policies, and programs;
 - B) Assure that the safety program for the project complies with Cal/OSHA and federal regulations related to power plant projects;
 - C) Assure that all construction and commissioning workers and supervisors receive adequate safety training;
-

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

- D) Complete accident and safety-related incident investigations and emergency response reports for injuries and inform the CPM of safety-related incidents; and
- E) Assure that all the plans identified in Conditions of Certification Worker Safety-1 and -2 are implemented. The CSS shall submit in the Monthly Compliance Report a monthly safety inspection report to include:
- F) Record of all employees trained for that month (all records shall be kept on site for the duration of the project);
- G) Summary report of safety management actions and safety-related incidents that occurred during the month;
- H) Report of any continuing or unresolved situations and incidents that may pose danger to life or health; and
- I) Report of accidents and injuries that occurred during the month.

Verification: At least 60 days prior to the start of site mobilization, the project owner shall submit to the CPM the name and contact information for the Construction Safety Supervisor (CSS). The contact information of any replacement CSS shall be submitted to the CPM within one business day.

WORKER SAFETY-4: The project owner shall make payments to the Chief Building Official (CBO) for the services of a Safety Monitor based upon a reasonable fee schedule to be negotiated between the project owner and the CBO. Those services shall be in addition to other work performed by the CBO. The Safety Monitor shall be selected by and report directly to the CBO and will be responsible for verifying that the Construction Safety Supervisor, as required in Condition of Certification Worker Safety-3, implements all appropriate Cal/OSHA and Energy Commission safety requirements. The Safety Monitor shall conduct on-site (including linear facilities) safety inspections at intervals necessary to fulfill those responsibilities.

Verification: At least 60 days prior to the start of construction, the project owner shall provide proof of its agreement to fund the Safety Monitor services to the CPM for review and approval.

WORKER SAFETY-5: The project owner shall ensure that a portable automatic external defibrillator (AED) is located on site during construction and operations and shall implement a program to ensure that workers are properly trained in its use and that the equipment is properly maintained and functioning at all times. During construction and commissioning, the following persons shall be trained in its use and shall be on site whenever the workers that they supervise are on site: the Construction Project Manager or delegate, the Construction Safety Supervisor or delegate, and all shift foremen. During operations, all power plant employees shall be trained in its use. The training program shall be submitted to the CPM for review and approval.

Verification: At least 60 days prior to the start of site mobilization, the project owner shall submit to the CPM proof that a portable automatic external defibrillator (AED) exists on site and a copy of the training and maintenance program for review and approval.

WORKER SAFETY-6: The project owner shall provide a second access gate for emergency personnel to enter the site. This secondary access gate shall be at least one-quarter mile from the main gate, and provide a second access road that comes to the site. This road shall be at a minimum an all-weather gravel road, at least 20 feet wide, and with culverts to direct flow under the road at any wash the road may cross.

- A) Maintain the main access road and the second road and provide a plan for implementation.

Plans for the secondary access gate, the method of gate operation, gravel road, and to maintain the roads shall be submitted to the Riverside County Fire Department for review and comment and to the CPM for review and approval.

Verification: At least sixty (60) days prior to the start of site mobilization, the project owner shall submit to the Riverside County Fire Department and the CPM preliminary plans showing the location of a second access gate to the site, a description of how the gate will be opened by the fire department, and a description and map showing the location, dimensions, and composition of the main road, and the gravel road to the second gate. At least thirty (30) days prior to the start of site mobilization, the project owner shall submit final plans plus the road maintenance plan to the CPM for review and approval. The final plan submittal shall also include a letter containing comments from the Riverside County Fire Department or a statement that no comments were received.

WORKER SAFETY-7: The project owner shall fund its project-related share of cumulative impacts by paying the County of Riverside development as required by Condition of

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

Certification LAND-6, property taxes, and a one-time payment of \$570,000.

Verification: At least thirty (30) days prior to the start of site mobilization, the project owner shall provide to the CPM documentation that a letter of credit in the amount of \$570,000 has been provided to the RCFD.

WORKER SAFETY-8: The project owner shall develop and implement an enhanced Dust Control Plan that includes the requirements described in AQ-SC3 and AQ-SC4 and additionally requires:

- A) Site worker use of dust masks (NIOSH N-95 or better) whenever visible dust is present;
- B) Implementation of methods equivalent to Rule 402 of the Kern County Air Pollution Control District (as amended Nov. 3, 2004); and
- C) Implementation of enhanced dust control methods (increased frequency of watering, use of dust suppression chemicals, etc. consistent with AQ-SC4) immediately whenever visible dust comes from or onto the site or when PM10 measurements obtained when implementing ii (above) exceed 50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

Verification: At least 60 days prior to the commencement of site mobilization, the enhanced Dust Control Plan shall be provided to the CPM for review and approval.

WORKER SAFETY-9: During any construction activities, the project owner shall provide on-site:

- A) An Advanced Life Support Provider who is certified by Riverside Emergency Services (REMS) along with the appropriate equipment and supplies, either directly provided or provided through contract with a REMS-certified company; and
- B) A Basic Life Support Ambulance with a California certified driver for use during medical emergency events; and
- C) A Memorandum of Understanding (MOU) with REMS for utilization of air medical services

Verification: At least 30 days prior to the commencement of site mobilization, the project owner shall either provide a letter to the CPM from Riverside County stating this condition cannot lawfully be implemented in accordance with its ordinances or shall provide to the for review and approval:

- A) The name and contact information for the Advanced Life Support Provider. The contact information of any replacements shall be submitted to the CPM within one business day, and provide evidence in each Monthly Compliance Report during commercial operation; and
 - B) A letter to the CPM confirming that the Basic Life Support Ambulance is available and will be onsite during any construction activities and provide evidence in each January Monthly Compliance Report during construction; and
 - C) Proof of its MOU with REMS for air medical service and provide evidence in each January Monthly Compliance Report during [sic]
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WORKER SAFETY-11: The project owner shall provide the CPM with a schedule indicating when construction activities that create the potential for rescue incidents will be ongoing, the type of construction to be done, the names of the rescue team members to be onsite, and documentation showing that the rescue team members have the appropriate training.

Verification: At least 60 days prior to the commencement of any construction activities that create the potential for rescue incidents, the project owner shall provide to the Safety Monitor (provided for in WORKER SAFETY-4) for review and to the CPM for review and approval:

- A) A schedule indicating when the construction activities will occur;
 - B) A description of the type of construction to be done;
 - C) The names of the rescue team members to be onsite; and
 - D) Documentation showing that the rescue team members have the appropriate training.
-

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

HAZARDOUS

HAZ-1: The project owner shall not use any hazardous materials not listed in Hazardous Materials Appendix A, below, or in greater quantities than those identified by chemical name in Hazardous Materials Appendix A, unless approved in advance by the Compliance Project Manager (CPM).

Verification: In the Annual Compliance Report to the CPM, the project owner shall provide a list of hazardous materials contained at the facility.

HAZ-2: The project owner shall concurrently provide a Hazardous Materials Business Plan to the Hazardous Materials Division of the Riverside County Fire Department and the CPM for review. After receiving comments from the Hazardous Materials Division of the Riverside County Fire Department and the CPM, the project owner shall reflect all received recommendations in the final documents. If no comments are received from the county within 30 days of submittal, the project owner may proceed with preparation of final documents upon receiving comments from the CPM. Copies of the final Hazardous Materials Business Plan shall then be provided to the Hazardous Materials Division of the Fire Department for information and to the CPM for approval.

Verification: At least 60 days prior to receiving any hazardous material on the site for commissioning or operations, the project owner shall provide a copy of a final Hazardous Materials Business Plan to the CPM for approval.

HAZ-3: The project owner shall develop and implement a Safety Management Plan for delivery of liquid hazardous materials. The plan shall include an approved route from the major interstate highways to the site, safety procedures, protective equipment requirements, training and a checklist. It shall also include a section describing all measures to be implemented to prevent mixing of incompatible hazardous materials. This plan shall apply during construction, commissioning, and operation of the power plant.

Verification: At least 60 days prior to the delivery of any liquid hazardous material to the facility, the project owner shall provide a Safety Management Plan as described above to the CPM for review and approval.

HAZ-4: At least 30 days prior to commencing construction, a site-specific Construction Site Security Plan for the construction phase shall be prepared and made available to the CPM for review and approval. The Construction Security Plan shall include the following:

- A) Perimeter security consisting of fencing enclosing the construction area;
- B) Security guards;
- C) Site access control consisting of a check-in procedure or tag system for construction personnel and visitors;
- D) Written standard procedures for employees, contractors and vendors when encountering suspicious objects or packages on-site or off-site;
- E) Protocol for contacting law enforcement, the CPM in the event of suspicious activity or emergency; and
- F) Evacuation procedures.

Verification: At least 30 days prior to commencing construction, the project owner shall notify the CPM that a site-specific Construction Security Plan is available for review and approval.

HAZ-5: The project owner shall prepare a site-specific Operation Security Plan for the operational phase and shall be made available to the CPM for review and approval. The project owner shall implement site security measures addressing physical site security and hazardous materials storage. The level of security to be implemented shall not be less than that described below (as per Security Guidelines for the Electricity Sector NERC 2002).

- A) The Operation Security Plan shall include the following:
 - B) Permanent full perimeter fence or wall, at least eight feet high around the Power Block and Solar Field;
 - C) Main entrance security gate, either hand operable or motorized;
-

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

- D) Evacuation procedures;
- E) Protocol for contacting law enforcement, the CPM in the event of suspicious activity or emergency;
- F) Written standard procedures for employees, contractors and vendors when encountering suspicious objects or packages on-site or off-site;
 - 1) A statement (refer to sample, attachment "A") signed by the project owner certifying that background investigations have been conducted on all project personnel. Background investigations shall be restricted to ascertain the accuracy of employee identity and employment history, and shall be conducted in accordance with state and federal law regarding security and privacy;
 - 2) A statement(s) (refer to sample, attachment "B") signed by the contractor or authorized representative(s) for any permanent contractors or other technical contractors (as determined by the CPM after consultation with the project owner) that are present at any time on the site to repair, maintain, investigate, or conduct any other technical duties involving critical components (as determined by the CPM after consultation with the project owner) certifying that background investigations have been conducted on contractor personnel that visit the project site.
- G) Site access controls for employees, contractors, vendors, and visitors;
- H) Closed Circuit TV (CCTV) monitoring system, recordable, and viewable in the power plant control room and security station (if separate from the control room) capable of viewing, at a minimum, the main entrance gate; and
- I) Additional measures to ensure adequate perimeter security consisting of either:
- J) Security guard present 24 hours per day, seven days per week,

OR

- K) Power plant personnel on-site 24 hours per day, seven days per week and one of the following:
 - 1) The CCTV monitoring system required in number 8 above shall include cameras that are able to pan, tilt, and zoom (PTZ), have low-light capability, are recordable, and are able to view 100% of the perimeter fence to the power block, the outside entrance to the control room, and the front gate from a monitor in the power plant control room;

OR

- L) Perimeter breach detectors or on-site motion detectors.

The project owner shall fully implement the security plans and obtain CPM approval of any substantive modifications to the security plans. The CPM may authorize modifications to these measures, or may require additional measures, such as protective barriers for critical power plant components (e.g., transformers, gas lines, compressors, etc.) depending on circumstances unique to the facility or in response to industry-related standards, security concerns, or additional guidance provided by the U.S. Department of Homeland Security, the U.S. Department of Energy, or the North American Electrical Reliability Council, after consultation with appropriate law enforcement agencies and the applicant.

Verification: At least 30 days prior to the initial receipt of hazardous materials on-site, the project owner shall notify the CPM that a site-specific Operations Site Security Plan is available for review and approval. In the Annual Compliance Report, the project owner shall include a statement that all current project employee and appropriate contractor background investigations have been performed, and updated certification statements are appended to the Operations Security Plan. In the Annual Compliance Report, the project owner shall include a statement that the Operations Security Plan includes all current hazardous materials transport vendor certifications for security plans and employee background investigations.

WASTE

WASTE-1: The project owner shall provide the resume of an experienced and qualified professional engineer or professional geologist, who shall be available during site

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

characterization (if needed), demolition, excavation, and grading activities, to the CPM for review and approval. The resume shall show experience in remedial investigation and feasibility studies.

The professional engineer or professional geologist shall be given authority by the project owner to oversee any earth moving activities that have the potential to disturb contaminated soil and impact public health, safety and the environment.

Verification: At least 30 days prior to the start of site mobilization, the project owner shall submit the resume to the CPM for review and approval.

WASTE-2: If potentially contaminated soil is identified during site characterization, demolition, excavation or grading at either the proposed site or linear facilities, as evidenced by discoloration, odor, detection by handheld instruments, or other signs, the professional engineer or professional geologist shall inspect the site, determine the need for sampling to confirm the nature and extent of contamination, and provide a written report to the project owner, representatives of Department of Toxic Substances Control or Regional Water Quality Control Board, the CPM stating the recommended course of action.

Depending on the nature and extent of contamination, the professional engineer or professional geologist shall have the authority to temporarily suspend construction activity at that location for the protection of workers or the public. If, in the opinion of the professional engineer or professional geologist, significant remediation may be required, the project owner shall contact the CPM, and representatives of the Department of Toxic Substances Control or Regional Water Quality Control Board, for guidance and possible oversight.

Verification: The project owner shall submit any reports filed by the professional engineer or professional geologist to the CPM within 5 days of their receipt. The project owner shall notify the CPM within 24 hours of any orders issued to halt construction.

WASTE-3: The project owner shall prepare a Construction Waste Management Plan for all wastes generated during construction of the facility and shall submit the plan to the CPM for review and approval prior to the start of construction. The plan shall contain, at a minimum, the following:

- A) A description of all construction waste streams, including projections of frequency, amounts generated, and hazard classifications; and
- B) Management methods to be used for each waste stream, including temporary on-site storage, housekeeping and best management practices to be employed, treatment methods and companies providing treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/source reduction plans. The applicant shall strive to achieve at least a 50 percent reduction of waste construction and demolition materials by reuse and recycling to meet landfill waste diversion goals consistent with the Integrated Waste Management Act of 1989.

Verification: The project owner shall submit the Construction Waste Management Plan to the CPM for approval no less than 30 days prior to the initiation of construction activities at the site.

WASTE-4: The project owner shall prepare Unexploded Ordnance (UXO) Identification, Training and Reporting Plan to properly train all site workers in the recognition, avoidance and reporting of military waste debris and ordnance. The project owner shall submit the plan to the CPM and AO for review and approval prior to the start of construction. The plan shall contain, at a minimum, the following:

- A) A description of the training program outline and materials, and the qualifications of the trainers;
- B) Identification of available trained experts that will respond to notification of discovery of any ordnance (unexploded or not);
- C) A work plan to recover and remove discovered ordnance, and complete additional field screening, possibly including geophysical surveys to investigate adjacent areas for surface, near surface or buried ordnance in all proposed land disturbance areas; and
- D) The project owner shall provide documentation of the plan and provide survey results to the CPM.

Verification: The project owner shall submit the UXO Identification, Training and Reporting Plan to the CPM for approval no less than 60 days prior to the initiation of construction activities at the site. The results of geophysical surveys shall be submitted to the CPM within 30 days of completion of the surveys.

WASTE-5: The project owner shall obtain a hazardous waste generator identification number from the United States Environmental Protection Agency (USEPA) prior to generating

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

any hazardous waste during project construction and operations.

Verification: The project owner shall keep a copy of the identification number on file at the project site and provide documentation of the hazardous waste generation and notification and receipt of the number to the CPM in the next scheduled Monthly Compliance Report after receipt of the number. Submittal of the notification and issued number documentation to the CPM is only needed once unless there is a change in ownership, operation, waste generation, or waste characteristics that requires a new notification to USEPA. Documentation of any new or revised hazardous waste generation notifications or changes in identification number shall be provided to the CPM and AO in the next scheduled compliance report.

WASTE-6: Upon notification of any impending waste management-related enforcement action by any local, state, or federal authority, the project owner shall notify the CPM of any such action taken or proposed against the project itself, or against any waste hauler or disposal facility or treatment operator with which the owner contracts, and describe how the violation will be corrected.

Verification: The project owner shall notify the CPM in writing within 10 days of becoming aware of an impending enforcement action. The CPM shall notify the project owner of any changes that will be required in the way project-related wastes are managed.

WASTE-7: The project owner shall prepare an Operation Waste Management Plan for all wastes generated during operation of the proposed project and shall submit the plan to the CPM for review and approval. The plan shall contain, at a minimum, the following:

- A) A detailed description of all operation and maintenance waste streams, including projections of amounts to be generated, frequency of generation, and waste hazard classifications;
- B) Management methods to be used for each waste stream, including temporary on-site storage, housekeeping and best management practices to be employed, treatment methods and companies providing treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/source reduction plans;
- C) Information and summary records of conversations with the local Certified Unified Program Agency and the Department of Toxic Substances Control regarding any waste management requirements necessary for project activities. Copies of all required waste management permits, notices, and/or authorizations shall be included in the plan and updated as necessary;
- D) A detailed description of how facility wastes will be managed, and any contingency plans to be employed, in the event of an unplanned closure or planned temporary facility closure; and

A detailed description of how facility wastes will be managed and disposed of upon closure of the facility.

Verification: The project owner shall submit the Operation Waste Management Plan to the CPM for approval no less than 30 days prior to the start of project operation. The project owner shall submit any required revisions to the CPM within 20 days of notification from the CPM that revisions are necessary.

The project owner shall also document in each Annual Compliance Report the actual volume of wastes generated and the waste management methods used during the year; provide a comparison of the actual waste generation and management methods used to those proposed in the original Operation Waste Management Plan; and update the Operation Waste Management Plan as necessary to address current waste generation and management practices.

WASTE-8: The project owner shall ensure that all accidental spills or unauthorized releases of hazardous substances, hazardous materials, and hazardous waste are documented and remediated, and that wastes generated from accidental spills and unauthorized releases are properly managed and disposed of in accordance with all applicable federal, state, and local requirements.

The project owner shall document management of all accidental spills and unauthorized releases of hazardous substances, hazardous materials, and hazardous wastes that occur on the project property or related linear facilities. The documentation shall include, at a minimum, the following information: location of release; date and time of release; reason for release; volume released; how release was managed and material cleaned up; amount of contaminated soil and/or cleanup wastes generated; if the release was reported; to whom the release was reported; release corrective action and cleanup requirements placed by regulating agencies; level of cleanup achieved and actions taken to prevent a similar release or spill; and disposition of any hazardous wastes and/or contaminated soils and materials that may have been generated by the release.

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

Verification: A copy of the accidental spill or unauthorized release documentation shall be provided to the CPM within 30 days of the date the release was discovered.

BIOLOGICAL

BIO-1: The project owner shall assign at least one Designated Biologist to the project. The project owner shall submit the resume of the proposed Designated Biologist, with at least three references and contact information, to the Energy Commission Compliance Project Manager (CPM) for approval in consultation with Western, BLM, CDFG, and USFWS. USFWS <www.fws.gov/ventura/speciesinfo/protocols_guidelines/docs/dt> designates biologists who are approved to handle tortoises as "Authorized Biologists." Such biologists have demonstrated to USFWS that they possess sufficient desert tortoise knowledge and experience to handle and move tortoises appropriately, evaluate their health, and draw blood, and have received USFWS approval. Authorized Biologists are responsible for the implementation of all desert tortoise measures and are permitted, in turn, to approve specific monitors to handle tortoises, at their discretion. CDFG must also approve such biologists, potentially including individual approvals for monitors approved by the Authorized Biologist. Designated Biologists for the Project are the equivalent of USFWS Authorized Biologists. Only Designated Biologists and certain Biological Monitors who have been approved by the Designated Biologist shall be allowed to handle desert tortoises.

- A) The Designated Biologist must meet the following minimum qualifications:
- B) Bachelor's degree in biological sciences, zoology, botany, ecology, or a closely related field;
- C) Three years of experience in field biology or current certification of a nationally recognized biological society, such as The Ecological Society of America or The Wildlife Society;
- D) Have at least one year of field experience with biological resources found in or near the project area;
- E) Meet the current USFWS Authorized Biologist qualifications criteria (www.fws.gov/ventura/speciesinfo/protocols_guidelines), demonstrate familiarity with protocols and guidelines for the desert tortoise, and be approved by the USFWS (note that biologists who meet previous criteria may not meet current criteria due to requirements to assess health and draw blood; biologists must obtain training such as that offered through the Desert Tortoise Conservation Center in Las Vegas); and
- F) Possess a California ESA Memorandum of Understanding pursuant to Section 2081(a) for desert tortoise.

In lieu of the above requirements, the resume shall demonstrate to the satisfaction of the CPM in consultation with Western, BLM, CDFG and USFWS, that the proposed Designated Biologist or alternate has the appropriate training and background to effectively implement the conditions of certification.

Verification: No fewer than 30 days prior to construction-related ground disturbance, the Project owner shall submit the name(s) and resume(s) of the Designated Biologists(s) along with copies of the completed USFWS Desert Tortoise Authorized Biologist Request Form(s) (www.fws.gov/ventura/speciesinfo/protocols_guidelines) to the USFWS and CPM for review and final approval in consultation with Western, BLM, and CDFG. No construction-related ground disturbance, grading, boring, or trenching shall commence until an approved Designated Biologist is available to be on site.

If a Designated Biologist needs to be replaced, the specified information of the proposed replacement must be submitted to the CPM at least 10 working days prior to the termination or release of the preceding Designated Biologist. In an emergency, the project owner shall immediately notify the CPM to discuss the qualifications and approval of a short-term replacement while a permanent Designated Biologist is proposed to the CPM for consideration.

BIO-2: The project owner shall ensure that the Designated Biologist performs the activities described below during any site mobilization activities, construction-related ground disturbance, grading, boring, or trenching activities. The Designated Biologist may be assisted by the approved Biological Monitor(s) but remains the contact for the project owner, the CPM, Western, CDFG, BLM, and USFWS. The Designated Biologist Duties shall include, but shall not be limited to those listed below. Additional responsibilities of the Biological Monitor are set forth in Condition of Certification BIO-9.

- A) Advise the project owner's Construction and Operation Managers on the implementation of the biological resources conditions of certification;
 - B) Consult on the preparation of the Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP) to be submitted by the project owner;
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

- C) Be available to supervise, conduct, and coordinate mitigation, monitoring, and other biological resources compliance efforts, particularly in areas requiring avoidance or containing sensitive biological resources, such as special-status species or their habitat;
- D) Clearly mark sensitive biological resource areas and inspect these areas at appropriate intervals for compliance with regulatory terms and conditions;
- E) Inspect active construction areas where animals may have become trapped prior to construction commencing each day. At the end of each work day, inspect for the installation of structures that prevent entrapment or allow escape during periods of construction inactivity. Periodically inspect areas with high vehicle activity (e.g., parking lots) for animals in harm's way;
- F) Notify the project owner and the CPM of any non-compliance with any biological resources condition of certification;
- G) Respond directly to inquiries of the CPM, Western, or any other agencies regarding biological resource issues;
- H) Maintain written records of the tasks specified above and those included in the BRMIMP. Summaries of these records shall be submitted in the Monthly Compliance Report and the Annual Compliance Report to the CPM;
- I) Consistent with BIO-3, train the Biological Monitors as appropriate, and ensure their familiarity with the BRMIMP, Worker Environmental Awareness Program (WEAP) training, and USFWS guidelines on desert tortoise surveys and handling procedures <www.fws.gov/ventura/speciesinfo/protocols_guidelines>; and
- J) Maintain the ability to be in regular, direct communication with representatives of CDFG, USFWS, BLM, Western, and the CPM, including notifying these agencies of dead or injured listed species and reporting special-status species observations to the California Natural Diversity Data Base consistent with Condition of Certification BIO-22.

Verification: The Designated Biologist shall provide copies of all written reports and summaries that document biological resources compliance activities in the Monthly Compliance Reports submitted to the CPM. If actions may affect biological resources during operation a Designated Biologist shall be available for monitoring and reporting. During project operation, the Designated Biologist shall submit record summaries in the Annual Compliance Report unless his or her duties cease, as approved by the CPM in consultation with Western, CDFG, BLM, and USFWS.

BIO-3: The Designated Biologist shall submit the resume, at least three references, and contact information of each of the proposed Biological Monitors to the CPM. The resume shall demonstrate, to the satisfaction of the CPM, the appropriate education and experience to accomplish the assigned biological resource tasks. The Biological Monitor is the equivalent of the USFWS designated Desert Tortoise Monitor (USFWS 2008c).

The Designated Biologist will be responsible for training the Biological Monitor(s); training shall include familiarity with the conditions of certification, BRMIMP, WEAP, and USFWS guidelines on desert tortoise surveys and handling procedures <www.fws.gov/ventura/speciesinfo/protocols_guidelines>.

Verification: The project owner shall submit the specified information to the CPM for approval, in consultation with Western, CDFG, BLM, and USFWS at least 30 days prior to the start of any site mobilization or construction-related ground disturbance, grading, boring, and trenching. The Designated Biologist shall submit a written statement to the CPM confirming that individual Biological Monitor(s) has been trained including the date when training was completed. If additional biological monitors are needed during construction, the specified information shall be submitted to the CPM for approval in consultation with Western, CDFG, BLM, and USFWS at least 10 days prior to their first day of monitoring activities.

BIO-4: The Biological Monitors shall assist the Designated Biologist in conducting surveys and in monitoring of site mobilization activities, construction-related ground disturbance, grading, boring, or trenching. The Designated Biologist shall remain the contact for the project owner the CPM, Western, CDFG, BLM, and USFWS.

Verification: The Designated Biologist shall submit in the Monthly Compliance Report to the CPM copies of all written reports and summaries that document biological resources compliance activities, including those conducted by Biological Monitors. If actions may affect biological resources during operation, a Biological Monitor, under the supervision of the Designated Biologist, shall be available for monitoring and reporting.

BIO-5: The project owner's construction/operation manager shall act on the advice of the Designated Biologist and Biological Monitor(s) to ensure conformance with the biological resources conditions of certification. The Designated Biologist shall have the authority to immediately stop any activity that is not in compliance with these conditions and/or order any reasonable measure to avoid take of an individual of a listed species. If required by the Designated Biologist and Biological Monitor(s), the project owner's construction/operation

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

manager shall halt all site mobilization, ground disturbance, grading, boring, trenching, and operation activities in areas specified by the Designated Biologist. The Designated Biologist shall:

- A) Require a halt to all activities in any area when determined that there would be an unauthorized adverse impact to biological resources if the activities continued;
- B) Inform the project owner and the construction/operation manager when to resume activities;
- C) Notify the CPM if there is a halt of any activities and advise them of any corrective actions that have been taken or would be instituted as a result of the work stoppage; and
- D) If the Designated Biologist is unavailable for direct consultation, the Biological Monitor shall act on behalf of the Designated Biologist.

Verification: The project owner shall ensure that the Designated Biologist or Biological Monitor notifies the CPM immediately (and no later than the morning following the incident, or Monday morning in the case of a weekend) of any non-compliance or a halt of any site mobilization, ground disturbance, grading, construction, and operation activities. The project owner shall notify the CPM of the circumstances and actions being taken to resolve the problem.

Whenever corrective action is taken by the project owner, a determination of success or failure will be made by the CPM in consultation with Western, CDFG, BLM, and USFWS as appropriate, within five working days after receipt of notice that corrective action is completed, or the project owner would be notified by the CPM that coordination with other agencies would require additional time before a determination can be made.

BIO-6: The project owner shall prepare and implement a Project-specific Worker Environmental Awareness Program (WEAP) and shall secure approval for the WEAP from the CPM in consultation with Western, CDFG, BLM, and USFWS. The WEAP shall be administered to all onsite personnel at the solar generator site, interconnector substation site, and on the transmission line alignments. The WEAP shall be administered to all surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, subcontractors, and delivery personnel. The WEAP shall be implemented during site preconstruction, construction, operation, and closure. The WEAP shall:

- A) Be developed by or in consultation with the Designated Biologist and consist of an on-site or training center presentation in which supporting written material and electronic media, including photographs of protected species, is made available to all participants;
 - B) Discuss the locations and types of sensitive biological resources on the project site and adjacent areas, and explain the reasons for protecting these resources; provide information to participants that no snakes other reptiles, bats, or any other wildlife shall be harmed or harassed;
 - C) Place special emphasis on desert tortoise, burrowing owl, golden eagle, nesting birds, desert kit fox, and American badger, including information on physical characteristics, distribution, behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements, and protection measures;
 - D) Include a discussion of fire prevention measures to be implemented by workers during project activities; request workers dispose of cigarettes and cigars appropriately and not leave them on the ground or buried;
 - E) Describe the temporary and permanent habitat protection measures to be implemented at the project site;
 - F) Identify whom to contact if there are further comments and questions about the material discussed in the program;
 - G) Include printed training materials, including photographs and brief descriptions of desert tortoises, burrowing owls, golden eagles, nesting birds, desert kit fox, roosting bats, and American badger, including behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements, and protection measures;
 - H) Prominently display posters and descriptions in offices, conference rooms, employee break rooms, and other areas where employees may congregate, of desert tortoises, burrowing owls, golden eagles, nesting birds, desert kit fox, roosting bats, and American badger, including behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements, and protection measures;
 - I) Direct all WEAP trainees to report all observations of listed species and their sign to the Designated Biologist for inclusion in the monthly compliance report; and
 - J) Include a training acknowledgment form to be signed by each worker indicating that they received training and shall abide by the guidelines.
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

The specific program can be administered by a competent individual(s) acceptable to the Designated Biologist.

Verification: At least 30 days prior to start of construction-related ground disturbance the Project owner shall provide to the CPM a copy of the WEAP for review and approval in consultation with Western, CDFG, BLM, and the USFWS. The Project owner also shall submit copies of all supporting written materials and electronic media prepared or reviewed by the Designated Biologist and a resume of the person(s) administering the program.

The project owner shall provide in the Monthly Compliance Report the number of persons who have completed the training in the prior month and a running total of all persons who have completed the training to date. At least 10 days prior to construction-related ground disturbance activities the project owner shall submit two copies of the approved final WEAP.

Throughout the life of the project, the WEAP shall be repeated annually for permanent employees, and shall be routinely administered within one week of arrival to any new construction, maintenance, or operations personnel, foremen, contractors, subcontractors, and other personnel potentially working within the project area. Upon completion of the orientation, employees shall sign a form stating that they attended the program and understand all protection measures. These forms shall be maintained by the project owner and shall be made available to the CPM upon request. Workers shall receive and be required to visibly display a hardhat sticker or certificate that they have completed the training. Training acknowledgement forms signed during construction shall be kept on file by the project owner for at least 6 months after the start of commercial operation.

During project operation, signed statements for operational personnel shall be kept on file for 6 months following the termination of an individual's employment.

BIO-7: The project owner shall develop a Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP), and shall submit two copies of the proposed BRMIMP to the CPM for review and approval in consultation with Western, CDFG, BLM, and USFWS. The project owner shall implement the measures identified in the approved BRMIMP. The BRMIMP shall incorporate avoidance and minimization measures described in final versions of the Hazardous Materials Plan; the Revegetation Plan; the Weed Management Plan; the Special-Status Plant Impact Avoidance and Minimization Plan; the Desert Tortoise Translocation Plan; the Raven Monitoring, Management, and Control Plan; the Burrowing Owl Relocation and Mitigation Plan; the Streambed Management Plan; the Evaporation Pond Design, Monitoring, and Management Plan; and the Avian and Bat Protection Plan.

The BRMIMP shall be prepared in consultation with the Designated Biologist and shall include accurate and up-to-date maps depicting the location of sensitive biological resources that require temporary or permanent protection during construction and operation. The BRMIMP shall include complete and detailed descriptions of the following:

- A) All biological resources mitigation, monitoring, and compliance measures proposed and agreed to by the project owner;
 - B) All biological resources conditions of certification identified as necessary to avoid or mitigate impacts;
 - C) All biological resource mitigation, monitoring, and compliance measures required in federal agency terms and conditions, such as those provided in the USFWS Biological Opinion and any additional Western or BLM stipulations;
 - D) All sensitive biological resources to be impacted, avoided, or mitigated by project construction, operation, and closure;
 - E) All required mitigation measures for each sensitive biological resource;
 - F) All measures that shall be taken to avoid or mitigate temporary disturbances from construction activities;
 - G) Duration for each type of monitoring and a description of monitoring methodologies and frequency;
 - H) Performance standards to be used to help decide if/when proposed mitigation is or is not successful;
 - I) All performance standards and remedial measures to be implemented if performance standards are not met;
 - J) Biological resources-related facility closure measures including a description of funding mechanism(s);
 - K) A process for proposing plan modifications to the CPM and any other appropriate agencies for review and approval; and
 - L) A requirement to submit any sightings of any special-status species that are observed on or in proximity to the project site, or during project surveys, to the California Natural
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

Diversity Data Base (CNDDB) per CDFG requirements.

Verification: The project owner shall submit the final BRMIMP to the CPM at least 30 days prior to start of any preconstruction site mobilization and construction-related ground disturbance, grading, boring, and trenching. The BRMIMP shall contain all of the required measures included in all biological Conditions of Certification. No construction-related ground disturbance, grading, boring, or trenching may occur prior to approval of the final BRMIMP by the CPM in consultation with Western, CDFG, BLM, and USFWS.

If any permits have not yet been received when the BRMIMP is first submitted, copies of these permits shall be submitted to the CPM within five days of their receipt, and the BRMIMP shall be revised or supplemented to reflect the permit

Biological Resources conditions within 10 days of their receipt by the project owner. Under no circumstances shall ground disturbance proceed without implementation of all permit conditions.

To verify that the extent of construction disturbance does not exceed that described in this analysis, the project owner shall submit aerial photographs, at an approved scale, taken before and after construction to the CPM. The first set of aerial photographs shall reflect site conditions prior to any preconstruction site mobilization and construction-related ground disturbance, grading, boring, and trenching, and shall be submitted at least 60 days prior to initiation of such activities. The second set of aerial photographs shall be taken subsequent to completion of construction, and shall be submitted to the CPM no later than 90 days after completion of construction. The project owner shall also provide a final accounting of the acreages of vegetation communities/cover types present before and after construction and a depiction of the approved project boundaries superimposed on the post project aerial photograph. If final acreages and/or disturbance footprints exceed those previously approved, the CPM shall coordinate with project owner, in consultation with Western, CDFG, BLM, and USFWS to determine appropriate mitigation for such impacts. Such mitigation may exceed the requirements as outlined in these Conditions of Certification (i.e., higher mitigation ratios may be imposed as a result of consultation with the wildlife agencies).

Any changes to the approved BRMIMP (including the project footprint) must be approved by the CPM in consultation with Western, BLM, CDFG, and USFWS before such action is taken.

Implementation of BRMIMP measures (for example, construction activities that were monitored, species observed) shall be reported in the Monthly Compliance Reports by the Designated Biologist. Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval in consultation with Western, CDFG, BLM, and USFWS, a written construction termination report identifying which items of the BRMIMP have been completed, a summary of all modifications to mitigation measures made during the project's preconstruction site mobilization and construction-related ground disturbance, grading, boring, and trenching, and which mitigation and monitoring items are still outstanding as well as a timeline for implementing outstanding items.

BIO-8: The project owner shall undertake the following measures to manage the construction site and related facilities in a manner to avoid or minimize impacts to biological resources. All measures shall be subject to review and approval by the CPM.

- A) **Limit Disturbance Areas and Perimeter Fencing.** The boundaries of all areas to be disturbed (including staging areas, access roads, and sites for temporary placement of spoils) shall be delineated with stakes and flagging prior to construction activities in consultation with the Designated Biologist. Spoils and topsoil shall be stockpiled in areas already disturbed or to be disturbed by construction, so that stockpile sites do not add to total disturbance footprint. All disturbances, project vehicles, and equipment shall be confined to the flagged areas. Parking areas, staging and disposal site locations shall similarly be located in areas without native vegetation or special-status species habitat.
 - B) **Minimize Road Impacts.** New and existing roads that are planned for construction, widening, or other improvements shall not extend beyond the flagged impact area as described above. All vehicles passing or turning around would do so within the planned impact area or in previously disturbed areas. Where new access is required outside of existing roads or the construction zone, the route shall be clearly marked (i.e., flagged and/or staked) prior to the onset of construction.
 - C) **Minimize Traffic Impacts.** Vehicular traffic during project construction and operation shall be confined to existing designated routes of travel to and from the project site, and cross country vehicle and equipment use outside designated work areas shall be prohibited. The speed limit shall not exceed 20 miles per hour within any part of the project area, maintenance roads for linear facilities, or unpaved access roads to the project site where desert tortoise clearance surveys and translocations have not been completed.
 - D) **Monitor During Construction.** Due to the possibility that desert tortoises, especially juveniles, may persist on the site after desert tortoise clearance surveys and exclusion fencing are completed, the Designated Biologist or Biological Monitor shall be present at the construction site during all project activities that have potential to disturb soil,
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure	
	<p>vegetation, and wildlife. The Designated Biologist or Biological Monitor shall walk immediately ahead of equipment during brushing and grading activities. Any time over the life of the project that a desert tortoise is found within the exclusion fencing, the Designated Biologist shall immediately contact the CPM, CDFG, and USFWS; monitor the tortoise's location and activities; and implement translocation of the animal in accordance with and the approved Desert Tortoise Translocation Plan and in consultation with the USFWS, CDFG, and CPM.</p>
E)	<p>Minimize Impacts of Transmission/Pipeline Alignments, Roads, Staging Areas. Staging areas for construction on the solar generator site shall be within the area that has been fenced with desert tortoise exclusion fencing and cleared. For transmission line construction or other activities outside of the solar generator site, access roads, pulling sites and storage and parking areas shall be designed, installed, and maintained with the goal of minimizing impacts to native plant communities and sensitive biological resources. The Designated Biologist or Biological Monitor shall evaluate potential for special status plants or wildlife at every potential disturbance site along the lengths of both transmission lines prior to any construction-related disturbance, include access improvements. Specifically, site selection of any area to be permanently or temporarily disturbed for transmission line construction and fiber-optic installation shall avoid any desert wash, desert microphyll woodland, or any aeolian sand habitat wherever feasible. Where these sites cannot feasibly be avoided, the Designated Biologist shall outline site-specific requirements to minimize impacts to habitat and wildlife. These requirements shall include, but would not be limited to, pre-construction clearance surveys, exclusion fencing (e.g., for desert tortoise or Mojave fringe-toed lizard), on-site monitoring, and post-construction remediation.</p>
F)	<p>Implement APLIC Guidelines. Transmission lines, fiber optic lines, and all electrical components shall be designed, installed, and maintained in accordance with the Avian Power Line Interaction Committee's (APLIC's) Suggested Practices for Avian Protection on Power Lines (APLIC 2006) and Mitigating Bird Collisions with Power Lines (APLIC 1994) to reduce the likelihood of large bird electrocutions and collisions.</p>
G)	<p>Avoid Use of Toxic Substances. Soil bonding and weighting agents used on unpaved surfaces shall be non-toxic to wildlife and plants.</p>
H)	<p>Minimize Lighting Impacts. Facility lighting shall be designed, installed, and maintained to prevent side casting of light towards wildlife habitat. To minimize risk of avian collisions with project features, only flashing or strobe lights shall be installed on features requiring safety lighting per FAA requirements.</p>
I)	<p>Minimize Noise Impacts. A continuous low-pressure technique shall be used for steam blows, to the extent possible, in order to reduce noise levels in sensitive habitat proximate to the Project area. Loud construction activities (e.g., unsilenced high pressure steam blowing and pile driving, or other) shall be avoided from February 15 to April 15 when it would result in noise levels over 65 dBA in nesting habitat. Loud construction activities may be permitted from February 15 to April 15 only if the Designated Biologist provides documentation (i.e., nesting bird data collected using methods described in BIO-13 and maps depicting location of the nest survey area in relation to noisy construction) to the CPM indicating that no active nests would be subject to 65 dBA noise.</p>
J)	<p>Avoid Vehicle Impacts to Desert Tortoise. Parking and storage shall occur only within the area enclosed by desert tortoise exclusion fencing to the extent feasible. No vehicles or construction equipment parked outside the fenced area shall be moved prior to an inspection of the ground beneath the vehicle for the presence of desert tortoise. If a desert tortoise is observed, it shall be left to move on its own. If it does not move within 15 minutes, a Designated Biologist or Biological Monitor under the Designated Biologist's direct supervision may remove and relocate the animal to a safe location if temperatures are within the range described in the USFWS' 2009 Desert Tortoise Field Manual (http://www.fws.gov/ventura/speciesinfo/protocols_guidelines). All access roads outside of the fenced project footprint shall be delineated with temporary desert tortoise exclusion fencing on either side of the access road, unless otherwise authorized by the CPM, in consultation with Western, BLM, USFWS, and CDFG.</p>
K)	<p>Avoid Wildlife Pitfalls:</p> <ol style="list-style-type: none"> 1) Backfill Trenches. At the end of each work day, the Designated Biologist shall ensure that all potential wildlife pitfalls (trenches, bores, temporary detention basins, and other excavations) have been backfilled. If backfilling is not feasible, all trenches, bores, temporary detention basins, and other excavations shall be sloped at a 3:1 ratio at the ends to provide wildlife escape ramps, or covered completely to prevent wildlife access, or fully enclosed with desert tortoise-exclusion fencing. All trenches, bores, temporary detention basins, and other excavations outside the areas permanently fenced with desert tortoise exclusion fencing shall be inspected periodically, but no less than three times, throughout the day and at the end of each workday by the Designated Biologist or a Biological Monitor. Should a desert tortoise or other wildlife become trapped, the Designated Biologist or Biological Monitor shall remove and, if applicable, relocate it as described in the Desert Tortoise Translocation Plan. Any wildlife encountered during the course of construction shall be allowed to leave the construction area unharmed.

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure
<p>2) Avoid Entrapment of Desert Tortoise. Any construction pipe, culvert, or similar structure with a diameter greater than 3 inches, stored less than 8 inches aboveground for one or more nights, shall be inspected for tortoises before the material is moved, buried, or capped. As an alternative, all such structures may be capped before being stored outside the fenced area, or placed on pipe racks.</p> <p>L) Minimize Standing Water. Water applied to dirt roads and construction areas (trenches or spoil piles) for dust abatement shall use the minimal amount needed to meet safety and air quality standards in an effort to prevent the formation of puddles, which could attract desert tortoises and common ravens to construction sites. A Biological Monitor shall patrol these areas to ensure water does not puddle and shall take appropriate action to reduce water application where necessary.</p> <p>M) Dispose of Road-killed Animals. Road-killed animals or other carcasses detected on roads near the project area shall be picked up immediately and delivered to the Designated Biologist or Biological Monitor. For all road-killed species, the Designated Biologist shall retain the carcass in a freezer on-site and contact CDFG within 30 working days for guidance on disposal or storage. For any road-killed special-status species, the Biological Monitor shall contact CDFG and USFWS (for golden eagle or federally-listed species, including desert tortoise) within one working day of receipt of the carcass for guidance on disposal or storage of the carcass. The Biological Monitor shall report the special-status species record as described in Conditions of Certification BIO-2, BIO-7, and BIO-22.</p> <p>N) Minimize Spills of Hazardous Materials. All vehicles and equipment shall be maintained in proper working condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. The Designated Biologist shall be informed of any hazardous spills immediately as directed in the project Hazardous Materials Plan. Hazardous spills shall be immediately cleaned up and the contaminated soil properly disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated area. Service/maintenance vehicles shall carry a bucket and pads to absorb leaks or spills.</p> <p>O) Worker Guidelines. During construction all trash and food-related waste shall be placed in self-closing containers and removed regularly from the site to prevent overflow. Workers shall not feed wildlife or bring pets to the project site, including the logistics, parking, and other ancillary areas. Except for law enforcement personnel, no workers or visitors to the site shall bring firearms or weapons. Vehicular traffic shall be confined to existing routes of travel to and from the project site, and cross country vehicle and equipment use outside designated work areas shall be prohibited. The speed limit when traveling on dirt access routes within desert tortoise habitat shall not exceed 20 miles per hour.</p> <p>P) Implement Erosion Control Measures. Standard erosion control measures shall be implemented for all phases of construction and operation to prevent any sediment run-off from exposed slopes from entering state-jurisdictional streambeds within or outside the Project Disturbance Area. Sediment and other flow-restricting materials shall be moved to a location where they shall not be washed back into the stream. All disturbed soils and roads within the project site shall be stabilized to reduce erosion potential, both during and following construction, except that soil stabilizer use may be limited in portions of roads crossing washes or stream channels consistent with applicable water quality requirements.</p> <p>Q) Monitor Ground-Disturbing Activities Prior to Pre-Construction Site Mobilization. If pre-construction site mobilization requires ground-disturbing activities such as for geotechnical borings or hazardous waste evaluations, a Designated Biologist or Biological Monitor shall be present to monitor any actions that could disturb soil, vegetation, or wildlife.</p> <p>R) Remove Unused Material and Equipment. All unused material and equipment, including soil and rock piles, will be removed upon completion of any maintenance activities located outside the permanently fenced area.</p> <p>S) Control and Regulate Fugitive Dust. To reduce the potential for the transmission of fugitive dust, the project owner shall implement dust control measures as described in staff's recommended Conditions of Certification AQ-SC4, AQ-SC5, and AQ-SC7 in the Air Quality section of this Staff Assessment.</p>
<p>Verification: All mitigation measures and their implementation methods shall be included in the BRMIMP and implemented. Implementation of the measures shall be reported in the Monthly Compliance Reports by the Designated Biologist. Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, a written construction termination report identifying how measures have been completed. If loud construction activities are planned between February 15 to April 15, no more than 10 days before initiation of such construction the Project owner shall provide documentation to the CPM indicating that no active nests occur in areas that would be subject to noise 65 dBA or greater.</p>
<p>BIO-9: The project owner shall provide the CPM, Western, BLM, CDFG, and USFWS with reasonable access to the project site and mitigation lands under the control of the project</p>

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

owner and shall otherwise fully cooperate with the Energy Commission's, Western's, BLM's, CDFG's, and USFWS's efforts to verify the project owner's compliance with, or the effectiveness of, mitigation measures set forth in the conditions of certification. The project owner shall hold harmless the Designated Biologist, Biological Monitor, the Energy Commission and staff, Western, BLM, CDFG, USFWS, and any other agencies with regulatory requirements addressed by the Energy Commission's sole permitting authority for any costs the project owner incurs in complying with the management measures, including stop work orders issued by the CPM, the Designated Biologist, or Biological Monitor. In addition to the duties described in BIO-2, the Designated Biologist shall do all of the following:

- A) Notification. Notify the CPM, Western, BLM, CDFG, and USFWS at least 14 calendar days before initiating ground-disturbing activities. Immediately notify the CPM, Western, BLM, CDFG, and USFWS in writing if the project owner is not in compliance with any conditions of certification, including but not limited to any actual or anticipated failure to implement mitigation measures within the time periods specified in the conditions of certification. CDFG shall be notified at their Southern Region Headquarters Office, 4949 Viewridge Avenue, San Diego, CA 92123; (858) 467-4201. USFWS shall be notified at the Carlsbad Fish and Wildlife Office, 6010 Hidden Valley Rd., 101, Carlsbad, CA 92011; (760) 431-9440.
 - B) Monitoring During Grading. Remain on site daily while grubbing and grading are taking place to avoid or minimize take of listed or special-status species, to check for compliance with all impact avoidance and minimization measures, and to check all exclusion zones to ensure that signs, stakes, and fencing are intact and that human activities are restricted in these protected zones.
 - C) Fence Monitoring. During construction, maintain and check desert tortoise exclusion fences on a daily basis to ensure the integrity of the fence is maintained. The Designated Biologist shall be present on site to monitor construction and determine fence placement during fence installation. During operation of the project, fence inspections shall occur at least once per month throughout the life of the project, and more frequently after storms or other events that might affect the integrity and function of desert tortoise exclusion fences. Fence repairs shall occur within two days (48 hours) of detecting problems that affect the functioning of the desert tortoise exclusion fencing. All wildlife found entrapped or dead in the fence shall be reported to the CPM, BLM, CDFG, and USFWS. Carcasses of animals entrapped in the fence shall be handled as described above in BIO-8 paragraph 14; the Designated Biologist shall retain the carcass in a freezer on-site and contact CDFG within 30 working days for guidance on disposal or storage. For special-status species, the Biological Monitor shall contact CDFG or (for federally-listed species, including desert tortoise) within one working day.
 - D) Monthly Compliance Inspections. Conduct compliance inspections at a minimum of once per month after clearing, grubbing, and grading are completed and submit a monthly compliance report to the CPM. The monthly compliance report shall include all reported observations of listed species made by WEAP trainees on the site pursuant to Condition of Certification BIO-6
 - E) Annual Listed Species Status Report. No later than January 31 of every year the project facility remains in operation, the Designated Biologist shall provide the CPM, BLM, CDFG, and USFWS an annual Listed Species Status Report, which shall include, at a minimum: 1) a general description of the status of the project site and construction/operation activities, including actual or projected completion dates, if known; 2) a copy of the table in the BRMIMP with notes showing the current implementation status of each mitigation measure; 3) an assessment of the effectiveness of each completed or partially completed mitigation measure in minimizing and compensating for project impacts, 4) recommendations on how effectiveness of mitigation measures might be improved, and 5) a summary of any agency approved modifications to the BRMIMP.
 - F) Final Listed Species Mitigation Report. No later than 45 days after initiation of project operation, provide the CPM a Final Listed Species Mitigation Report that shall include, at a minimum: 1) a copy of the table in the BRMIMP with notes showing when each of the mitigation measures was implemented; 2) all available information about project-related incidental take of listed species; 3) information about other project impacts on the listed species; 4) construction dates; 5) an assessment of the effectiveness of conditions of certification in minimizing and compensating for project impacts; 6) recommendations on how mitigation measures might be changed to more effectively minimize and mitigate the impacts of future projects on the listed species; and 7) any other pertinent information, including the level of take of the listed species associated with the project.
 - G) Notification of Injured, Dead, or Relocated Listed Species. In the event of a sighting in an active construction area (e.g., with equipment, vehicles, or workers), injury, kill, or relocation of any listed species, the CPM, BLM, CDFG, and USFWS shall be notified immediately by phone. Notification shall occur no later than noon on the business day following the event if it occurs outside normal business hours so that the agencies can determine if further actions are required to protect listed species. Written follow-up notification via FAX or electronic communication shall be submitted to these agencies within two calendar days of the incident and include the following information as
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure
<p>relevant:</p> <ol style="list-style-type: none"> 1) Injured Desert Tortoise. If a desert tortoise is injured as a result of project-related activities during construction, the Designated Biologist shall immediately take it to a CDFG-approved wildlife rehabilitation and/or veterinarian clinic. Any veterinarian bills for such injured animals shall be paid by the project owner. Following phone notification as required above, the CPM, BLM, CDFG, and USFWS shall determine the final disposition of the injured animal, if it recovers. Written notification shall include, at a minimum, the date, time, location, circumstances of the incident, and the name of the facility where the animal was taken. 2) Desert Tortoise Fatality. If a desert tortoise is killed by project-related activities during construction or operation, or if a desert tortoise is otherwise found dead, submit a written report with the same information as an injury report. These desert tortoises shall be salvaged according to guidelines described in Salvaging Injured, Recently Dead, Ill, and Dying Wild, Free-Roaming Desert Tortoise (Berry 2001). The project owner shall pay to have the desert tortoises transported and necropsied. The report shall include the date and time of the finding or incident. <p>H) Stop Work Order. The CPM may issue the project owner a written stop work order to suspend any activity related to the construction or operation of the project to prevent or remedy a violation of one or more conditions of certification (including but not limited to failure to comply with reporting, monitoring, or habitat acquisition obligations) or to prevent the illegal take of an endangered, threatened, or candidate species. The project owner shall comply with the stop work order immediately upon receipt thereof.</p>
<p>Verification: No later than two calendar days following the above-required notification of a sighting, kill, injury, or relocation of a listed species, the project owner shall deliver to the CPM, BLM, CDFG, and USFWS via FAX or electronic communication the written report from the Designated Biologist describing all reported incidents of the sighting, injury, kill, or relocation of a listed species, identifying who was notified and explaining when the incidents occurred. In the case of a sighting in an active construction area, the project owner shall, at the same time, submit a map (e.g., using Geographic Information Systems) depicting both the limits of construction and sighting location to the CPM, BLM, CDFG, and USFWS.</p> <p>No later than January 31st of every year the RSEP facility remains in operation, provide the CPM, BLM, CDFG, and USFWS an annual Listed Species Status Report as described above, and a summary of desert tortoise exclusion fence inspections and repairs conducted in the course of the year. No later than 45 days after initiation of project operation, provide the CPM a Final Listed Species Mitigation Report as described above.</p>
<p>BIO-10: The project owner shall provide restoration/compensation for impacts to native vegetation communities and develop and implement a Revegetation Plan for all areas subject to temporary (albeit long-term) project disturbance, including but not limited to linear features and berms of detention or debris basins, to the extent permitted by stormwater control requirements (see above, Construction Impacts to Vegetation). Upon completion of construction, all temporarily disturbed areas, including the logistics/lay down areas; all generator tie-line tower sites, pull sites, and similar areas shall be restored to pre-project grade and revegetated to minimize soil erosion and vulnerability to weed invasion. Other temporarily disturbed areas within the project area shall include, but shall not be limited to: all areas where underground infrastructure was installed, temporary access roads, construction work temporary lay-down areas, and construction equipment staging areas. The following measures shall be implemented for the revegetation effort areas not subject to the facility Landscape Plan. These measures will include:</p> <ol style="list-style-type: none"> A) Plan Details. The revegetation plan shall include at minimum: (a) locations and details for top soil storage; (b) methods to salvage and replant cacti, yucca, or other species described in BIO-12, or to plant out nursery stock of these species onto revegetation sites; (c) seed collection guidelines; (d) a schematic depicting the mitigation area; (e) time of year that the planting will occur and the methodology of the planting; (f) a description of the irrigation methodology if used; (g) measures to control exotic vegetation on site; (h) success criteria relating to soil conditions and weed abundance; and (i) a detailed monitoring program. All habitats dominated by non-native species prior to project disturbance shall be revegetated using appropriate native species. This plan shall also contain contingency measures for failed restoration efforts (efforts not meeting success criteria). B) Topsoil Salvage. Topsoil shall be stockpiled from the project site for use in revegetation of the disturbed soils. The topsoil excavated shall be segregated, kept intact, and protected, under conditions shown to sustain seed bank viability. The upper 1 inch of topsoil which contains the seed bank shall be scraped and stockpiled for use as the top-dressing for the revegetation area. An additional 6 to 8 inches of soil below the top 1 inch of soil shall also be scraped and separately stockpiled for use in revegetation areas. Topsoil shall be replaced in its original vertical orientation following ground disturbance, ensuring the integrity of the top one inch in particular. All other elements of soil stockpiling shall be conducted as described on pages 39-40 of Rehabilitation of Disturbed Lands in California (Newton and Claassen 2003). C) Seed and Nursery Stock. Only seed or potted nursery stock of locally occurring native species shall be used for revegetation. Seeds shall contain a mix of short-lived early pioneer species such as native annuals and perennials and subshrubs. Seeding and planting shall be conducted as described in Chapter 5 of Rehabilitation of Disturbed

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

Lands in California (Newton and Claassen 2003). A list of plant species suitable for Colorado Desert region revegetation projects, including recommended seed treatments, are included in Appendix A-9 of the same report. The list of plants observed during the special-status plant surveys of the project area can also be used as a guide to site-specific plant selection for revegetation. In conformance with BLM policy, the project owner shall include salvaged or nursery stock yucca (all species), and cacti (excluding cholla species, genus *Cylindropuntia*), in revegetation plans and implementation affecting BLM lands, as described in BIO-12.

- D) **Monitoring Requirement and Success Criteria.** Post-seeding and planting monitoring will be yearly and shall continue for a period of no less than two years or until the defined success criteria are achieved. If the criteria have not been met, the project owner is responsible for replacement planting to achieve these requirements or other remedial action as agreed to by the CPM in consultation with BLM and Western. Replacement seeding or planting shall be monitored and evaluated by the same criteria as required for original revegetation plantings. Remediation activities (e.g., additional planting, removal of non-native invasive species, or erosion control) shall be taken during the two year period if necessary to ensure the success of the restoration effort. If the mitigation fails to meet the established performance criteria after the the two year maintenance and monitoring period, monitoring and remedial activities shall extend beyond the the two year period until the criteria are met or unless otherwise specified by the CPM in consultation with BLM and Western. The following performance standards must be met by the end of monitoring year two:
- 1) At least 80% of the species observed within the temporarily disturbed areas shall be native species that naturally occur in desert scrub habitats; and
 - 2) Cover and density of non-native plant species within the temporarily disturbed areas shall be no greater than in comparable surrounding lands that have not been disturbed by the project.
- E) **Replacement.** If a fire occurs in a revegetation area within the the two year monitoring period, the owner shall be responsible for a one-time replacement. If a second fire occurs, no replanting is required, unless the fire is caused by the owner's activity (e.g., as determined by BLM or other firefighting agency investigation).

Verification: All mitigation measures and their implementation methods shall be included in the BRMIMP and implemented.

Within 90 days after completion of each year of project construction, the project owner shall provide to the CPM verification of the total vegetation acreage subject to temporary and permanent disturbance and a written report identifying which items of the Revegetation Plan have been completed, a summary of all modifications to mitigation measures made during the project's construction phase, and which items are still outstanding. To monitor and evaluate the success of the revegetation, the project owner shall submit annual reports of the revegetation including the status of the site, percent cover of native and exotics, and any remedial actions conducted by the owner to the CPM and BLM.

On January 31st of each year following construction until the completion of the revegetation monitoring specified in the Revegetation Plan, the Designated Biologist shall provide a report to the CPM that includes: a summary of revegetation activities for the year, a discussion of whether revegetation performance standards for the year were met, and recommendations for revegetation remedial action, if warranted, that are planned for the upcoming year.

BIO-11: The project owner shall prepare and implement a Weed Management Plan that meets the approval of the CPM, in consultation with Western, BLM, CDFG, and USFWS. At minimum, the Weed Management Plan shall include the following:

- A) An assessment of nonnative and invasive weeds occurring onsite prior to construction activities;
- B) An assessment of nonnative and invasive weeds that could be introduced into the project area;
- C) A description of methods to be used to survey for the presence of introduced weeds during construction and operation;
- D) Monitoring and weed control methods to be employed during operation;
- E) Specific and detailed guidelines for herbicide use to prevent overspray onto surrounding areas where it would adversely affect wildlife or native plants; and
- F) Reporting requirements.

The final plan shall only include weed control measures for target weeds with a demonstrated record of success, based on the best available information from sources such as: The Nature Conservancy's The Global Invasive Species Team, Cooperative Extension, California Invasive Plant Council:

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

<http://www.cal-ipc.org/ip/management/plant_profiles/index.php>.

and the California Department of Food & Agriculture Encycloweed: <http://www.cdfa.ca.gov/phpps/ipc/encycloveedia/encycloveedia_h p.htm>. The methods shall meet the following criteria:

Manual: well-timed removal of plants or seed heads with hand tools; seed heads and plants must be disposed of in accordance with guidelines from the Riverside County Agricultural Commissioner.

Chemical: Herbicides known to have residual toxicity, such as pre-emergents and pelts, shall not be used in natural areas or within the engineered channels. Only the following application methods may be used: wick (wiping onto leaves); inner bark injection; cut stump; frill or hack & squirt (into cuts in the trunk); basal bark girdling; foliar spot spraying with backpack sprayers or pump sprayers at low pressure or with a shield attachment to control drift, and only on windless days, or with a squeeze bottle for small infestations

In addition to describing weed eradication and control methods, and a reporting plan for weed management during and after construction, the final Weed Management Plan shall include at minimum the following Best Management Practices to prevent the spread and propagation of weeds:

- A) Limit the extent of any vegetation and/or ground disturbance to the absolute minimum needed, and limit ingress and egress to defined routes.
- B) Install and maintain vehicle wash and inspection stations and closely monitor the types of materials brought onto the site.
- C) Reestablish vegetation on disturbed sites with native seed mixes (measures and performance standards to be consistent with Revegetation Plan, described in Condition of Certification BIO-10).
- D) Monitoring and timely implementation of control measures to ensure early detection and eradication for weed invasions. Weed infestations must be controlled or eradicated as soon as possible upon discovery, and before they go to seed, to prevent further expansion.
- E) Use only weed-free straw or hay bales used for sediment barrier installations, and weed-free seed.
- F) Reclamation and revegetation shall occur on all temporarily disturbed areas, including, but not limited to, temporary access roads, construction work temporary lay-down areas, and staging areas.
- G) Control weeds in areas where irrigation and mirror washing take place.
- H) Prohibit on-site storage or disposal of mulch or green waste from weed material to prevent inadvertent introduction and spread of invasive plants beyond the immediate vicinity of the project area and possibly into rare plant populations off-site. Mulch or green waste shall be removed from the site in a covered vehicle to prevent seed dispersal, and transported to a licensed landfill or composting facility.
- I) Indicate where herbicides may be used, which herbicides, and specify techniques to be used to avoid chemical drift or residual toxicity to special-status plants, consistent with guidelines provided by the Nature Conservancy's The Global Invasive Species Team <<http://www.invasive.org/gist/products.html>>
- J) Avoid herbicide use or other control methods in or around Environmentally Sensitive Areas (ESAs, see Condition of Certification BIO-12) on-site or off-site; prevent any herbicide drift into ESAs.

Nonnative and invasive weed infestations will be flagged by the Designated Biologist or Biological Monitor and controlled, using either mechanical (hand pulling, mowing) or chemical methods as approved by the CPM and, as appropriate, Western or BLM. Only state and BLM-approved herbicides will be used, and all herbicide applicators will possess a qualified herbicide applicator license from the state. All herbicide applications will follow U.S. Environmental Protection Agency label instructions and be performed in accordance with federal, state, and local laws and regulations.

From the time construction begins and throughout the life of the project, surveying for new invasive weed populations and the monitoring of identified and treated populations shall be required within the project area. Surveying and monitoring for weed infestations shall occur at least two times per year (timed to occur early and late in the growing season). Treatment of all identified weed populations shall occur at a minimum of once annually. When no new seedlings or resprouts are observed at treated sites for three consecutive, normal rainfall

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

years, the weed population can be considered eradicated and weed control efforts may cease for that impact site.

Verification: At least 30 days prior to the start of any project-related ground disturbance activities, the project owner shall provide the CPM and BLM with the final version of the Weed Management Plan. All modifications to the approved Weed Management Plan shall be made only after consultation with the CPM in consultation with Western, BLM, USFWS, and CDFG. Within 30 days after completion of project construction, the project owner shall provide to the CPM for review and approval, a written report identifying which items of the Weed Management Plan have been completed, a summary of all modifications to mitigation measures made during the project's construction phase, and which items are still outstanding. A summary report on weed management on the project site shall be submitted in the Annual Compliance Report during facility operations.

BIO-12: This Condition contains the following five sections:

- A) Section A: Avoidance and Minimization Measures describes measures to avoid and protect Harwood's milk-vetch locations on the generator tie-line alignment within 250 feet of project activities (including access roads, staging areas, laydown areas, parking and storage areas) from accidental and indirect impacts during construction, operation, and closure.
- B) Section B: Conformance with BLM Plant Protection Policies describes measures to salvage and transplant certain cacti, yucca, and other species in conformance with BLM policies.

"Project Disturbance Area" encompasses all areas to be temporarily and permanently disturbed by the Project, including the solar generator site, linear facilities, and areas disturbed by temporary access roads, fence installation, construction work lay-down and staging areas, parking, storage, or by any other activities resulting in disturbance to soil or vegetation. Nothing in this condition requires the project owner to conduct botanical surveys on private lands adjacent to the project site when the project owner has made reasonable attempts to obtain permission to enter the property for survey work but was unable to obtain such permission

The Project owner shall implement the following measures in Section A and B to avoid, minimize, and compensate for impacts to special-status plant species:

Section A: Special Status Plant Impact Avoidance and Minimization Measures

To protect Harwood's milk-vetch or other CNPS List 1 or List 2 plants (excluding chaparral sand-verbena) located within the project area or within 250 feet of its boundaries (including access roads, staging areas, laydown areas, parking and storage areas) from accidental and indirect impacts during construction, operation, and closure, the Project owner shall implement the following measures:

- A) Designated Botanist. An experienced botanist shall oversee compliance with all special-status plant avoidance, minimization, and compensation measures described in this condition throughout construction, operation, and closure. The Designated Botanist shall oversee and train all other Biological Monitors tasked with conducting botanical survey and monitoring work. The Designated Botanist shall be a qualified botanist knowledgeable in the complex biology of the local flora and consistent with CDFG (2009) and BLM (2009b) protocols.
 - B) Special Status Plant Impact Avoidance and Minimization Plan. The Project owner shall prepare and implement a Special Status Plant Impact Avoidance and Minimization Plan and shall incorporate the Plan into the BRMIMP (BIO-7). The Plan shall be designed to prevent direct or indirect effects of project construction and operation to CNPS List 1 and List 2 plants (excluding chaparral sand-verbena) within or within 250 feet of the project disturbance area. The Plan shall include the following elements:
 - 1) Site Design Modifications: Incorporate site design modifications to minimize impacts to special-status plants along the Project linears, as follows: limit the width of the work area; adjust the location of staging areas, lay downs, spur roads and poles or towers; drive and crush vegetation as an alternative to blading temporary roads to preserve soil integrity and seed banks, and adjust the alignments of roads and access points within the constraints of the ROW. These modifications shall be clearly depicted on the grading and construction plans, and on report-sized maps in the BRMIMP.
 - 2) Designate Environmentally Sensitive Areas (ESAs). Before construction, designate ESAs to protect all known CNPS List 1 or List 2 plant locations (excluding chaparral sand-verbena) within the project disturbance area or within 250 feet of disturbance area. The locations of ESAs shall be clearly depicted on construction drawings, which shall also include all avoidance and minimization measures on the margins of the construction plans. The boundaries of the ESAs shall provide a minimum of 250 feet buffer area between plant locations and any ground-disturbing project activity. The ESAs shall be clearly delineated in the field with fencing and signs prohibiting movement of the fence under penalty of work stoppages and additional compensatory mitigation. ESAs shall also be marked (with signage or other markers) to ensure
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure
that avoided plants are not inadvertently harmed during construction.
3) Special-Status Plant Worker Environmental Awareness Program (WEAP). The WEAP (BIO-6) shall include training components specific to protection of special-status plants as outlined in this condition.
4) Herbicide and Soil Stabilizer Drift Control Measures. Special-status plant occurrences within 250 feet of the Project Disturbance Area shall be protected from any potential herbicide and soil stabilizer drift. The Weed Control Program (BIO-11) shall include measures to avoid chemical drift or residual toxicity to special-status plants consistent with guidelines such as those provided by Hillmer and Liedtke (2003) and Kegley et al. (2010).
5) Erosion and Sediment Control Measures. Erosion and sediment control measures shall avoid adverse impacts to ESAs and shall not use invasive or non-native plants in seed mixes, introduce pest plants through contaminated seed or straw, etc. These measures shall be incorporated in the Drainage, Erosion, and Sedimentation Control Plan required under SOIL&WATER-1.
6) Avoid Special-Status Plant Occurrences. Areas for spoils, equipment, vehicles, and materials storage areas; parking; equipment and vehicle maintenance areas, and wash areas shall be placed at least 100 feet from the boundaries of any ESAs.
7) Monitoring and Reporting Requirements. The Designated Botanist shall conduct weekly monitoring of the ESAs that protect special-status plant occurrences during construction and decommissioning activities.

Section B: Conformance with BLM Plant Protection Policies

It is BLM policy to salvage yucca and cactus plants (excluding cholla species, genus *Cylindropuntia*) and transplant them to undisturbed sites within project Rights of Way. Staff recommends conformance with policy, as follows:

- A) The project owner shall inventory all plants subject to BLM policies on all NLM lands within the Project Disturbance Area that would be removed or damaged by proposed project construction.
- B) The project owner shall prepare a Protected Plant Salvage Plan in conformance with BLM standards for review and approval by the CPM in consultation with BLM. The plan shall include detailed descriptions of proposed methods to salvage plants; transport them; store them temporarily (as needed); maintain them in temporary storage (i.e., irrigation, shade protection, etc.); proposed transplantation locations and methods for permanent relocation; proposed irrigation and maintenance methods at transplantation sites; and a monitoring plan to verify survivorship and establishment of translocated plants for a minimum of five years.
- C) Prior to initiating any ground-disturbing activities on the project site, the project owner shall implement the Protected Plant Replacement measures as approved by the CPM, in consultation with BLM's State Botanist.

The Special-Status Plant Impact Avoidance and Minimization Measures shall be incorporated into the BRMIMP as required under Condition of Certification BIO-7.

Verification: Implementation of the special-status plant impact avoidance and minimization measures shall be reported in the Monthly Compliance Reports prepared by the Designated Botanist. Within 30 days after completion of Project construction, the Project owner shall provide to the CPM, for review and approval in consultation with the BLM State Botanist, a written construction termination report identifying how measures have been completed.

The Project owner shall submit a monitoring report every year for the life of the project to monitor effectiveness of protection measures for all avoided special-status plants to the CPM and BLM State Botanist. The monitoring report shall include: dates of worker awareness training sessions and attendees, an inventory of the special-status plant occurrences and description of the habitat conditions, an indication of population and habitat quality trends, and description of the remedial action, if warranted and planned for the upcoming year.

Section A. No less than 30 days prior to the start of ground-disturbing activities the Project owner shall submit grading plans and construction drawings depicting the location of Environmentally Sensitive Areas and the Avoidance and Minimization Measures contained in Section A of this Condition. The project owner shall coordinate with the CPM and BLM's Wildlife Biologist to revise and finalize boundaries of the ESAs.

No less than 30 days prior to the start of ground-disturbing activities the Project owner shall submit to the CPM for review and approval, in consultation with the BLM State Botanist, the

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

name and resume of the project's Designated Botanist. If a Designated Botanist needs to be replaced, the specified information of the proposed replacement must be submitted to BLM's Wildlife Biologist and the CPM as soon as possible prior to the termination or release of the Designated Biologist. In an emergency, the project owner shall immediately notify the BLM's Wildlife Biologist and the CPM to discuss the qualifications and approval of a short-term replacement while a permanent Designated Botanist is proposed to BLM's Wildlife Biologist and the CPM and for consideration.

No less than 30 days prior to ground-disturbing activities the Project owner shall submit a Special Status Plant Impact Avoidance and Minimization Plan to the CPM for review and approval, in consultation with the BLM State Botanist. Implementation of the impact avoidance and minimization measures shall be reported in the Monthly Compliance Reports prepared by the Designated Botanist. Within 30 days after completion of Project construction, the Project owner shall provide to the CPM, for review and approval in consultation with the BLM State Botanist, a written construction termination report identifying how measures have been completed.

The Project owner shall submit a monitoring report every year for the life of the project to monitor effectiveness of protection measures for all ESAs to the CPM and BLM State Botanist. The monitoring report shall include: dates of worker awareness training sessions and attendees, an inventory of the special-status plant occurrences and description of the habitat conditions, an indication of population and habitat quality trends, and description of the remedial action, if warranted and planned for the upcoming year. The project owner shall coordinate with the CPM and BLM to revise and finalize monitoring reports and all reports described in this section, and shall specifically report any difficulties in meeting the protection goals and cooperatively develop adaptive measures as needed.

Section B. The project owner shall coordinate with the CPM and BLM's Wildlife Biologist to revise and finalize all plans and reports named in this section. Verification and reporting shall be as described in BIO-10 and shall be included in reports described therein. Within 90 days after completion of each year of project construction, the project owner shall provide to the CPM verification of the numbers or acreage of plants covered in this Condition (i.e., species named in BLM and County policies) which have been removed or salvaged over the course of the year. Annual revegetation reports described in BIO-10 verification shall include summaries of salvage and planting operations and monitoring results. Compliance reports shall include summaries of written and photographic records of the plan implementation described above. Compliance reports shall be submitted annually for a period not less than 5 years to document irrigation, maintenance, and monitoring results, including plant survival.

BIO-13: Pre-construction nest surveys for bird species other than burrowing owls shall be conducted if construction activities will occur during the breeding period (from February 1 through August 31). Burrowing owl surveys are addressed in BIO-19. The Designated Biologist or Biological Monitor conducting the surveys shall be experienced bird surveyors and familiar with standard nest-locating techniques such as those described in Martin and Guepel (1993). Surveys shall be conducted in accordance with the following guidelines. Nothing in this condition requires the project owner to conduct nesting bird surveys by entering private lands adjacent to the project site when the project owner has made reasonable attempts to obtain permission to enter the property for survey work but was unable to obtain such permission. In this situation only, the project owner may substitute binocular surveys for protocol field surveys.

Surveys shall cover all potential nesting habitat in the project site and within 500 feet of the boundaries of the plant site and linear facilities;

At least two pre-construction surveys shall be conducted, separated by a minimum 10-day interval. One of the surveys shall be conducted within the 10 days preceding initiation of construction activity. Additional follow-up surveys may be required if periods of construction inactivity exceed one week in any given area, an interval during which birds may establish a nesting territory and initiate egg laying and incubation;

If active nests are detected during the survey, a 500-foot no-disturbance buffer zone shall be implemented. If active raptor nests or bat maternity roosts are detected during the survey, a 1200-foot no-disturbance buffer zone shall be implemented. A monitoring plan shall be prepared and implemented to ensure no disturbance takes place within the buffer areas. This protected area surrounding the nest may be adjusted by the Designated Biologist in consultation with CDFG, USFWS, Western, and the CPM. Nest locations shall be mapped using GPS technology and submitted, along with a weekly report stating the survey results, to the CPM; and

The Designated Biologist shall monitor the nest until he or she determines that nestlings have fledged and dispersed. Activities that might, in the opinion of the Designated Biologist and in consultation with the CPM, disturb nesting activities shall be prohibited within the buffer zone until such a determination is made.

Verification: Prior to the start of any project-related ground disturbance activities, the project owner shall provide the CPM a letter-report describing the findings of the pre-construction nest surveys, including the time, date, and duration of the survey; identity and qualifications of the surveyor(s); and a list of species observed. If active nests are detected during the survey, the report shall include a map or aerial photo identifying the location of the nest(s) and shall depict the boundaries of the no-disturbance buffer zone around the nest(s).

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

BIO-14: The project owner shall undertake appropriate measures to manage the construction site(s) and related facilities in a manner to avoid or minimize impacts to desert tortoise. Methods for clearance surveys, fence specification and installation, tortoise handling, artificial burrow construction, egg handling and other procedures shall be consistent with those described in the USFWS' 2009 Desert Tortoise Field Manual <http://www.fws.gov/ventura/speciesinfo/protocols_guidelines> or more current guidance provided by CDFG and USFWS. The project owner shall also implement all terms and conditions described in the Biological Opinion for the project to be prepared by USFWS. These measures include, but are not limited to, the following:

- A) **Desert Tortoise Exclusion Fence Installation.** To avoid impacts to desert tortoises, permanent desert tortoise exclusion fencing shall be installed at the solar generator site along the permanent perimeter security fence and permanent access road from the security gate southward. Temporary exclusion fencing shall be installed along any additional construction site associated with the project, including the 26-acre construction laydown areas, stormwater diversion channels, and proposed generator tie-line alignment work sites. Permanent desert tortoise exclusion fencing shall also be installed at the interconnector substation site prior to construction activities at that site. The only exception to the requirement for exclusion fencing shall be for temporary construction sites where a qualified desert tortoise monitor is on-site throughout all construction activities (e.g., transmission line construction sites). The proposed alignments for all desert tortoise exclusion fencing shall be flagged and surveyed for desert tortoise within 24 hours prior to the initiation of fence construction. Clearance surveys of the perimeter fence and utility rights-of-way alignments shall be conducted by the Designated Biologist(s) using techniques approved by the USFWS and CDFG and may be conducted in any season with USFWS and CDFG approval. Biological Monitors may assist the Designated Biologist under his or her supervision with the approval of the CPM, USFWS, and CDFG. These fence clearance surveys shall provide 100 percent coverage of all areas to be disturbed and an additional buffer approximately 90 feet wide centered on the fence alignment (i.e., 45 feet along each side of the fence line). Survey transects shall be no greater than 15 feet apart. All desert tortoise burrows, and burrows constructed by other species that might be used by desert tortoises, shall be examined to assess occupancy of each burrow by desert tortoises and handled in accordance with the USFWS' 2009 Desert Tortoise Field Manual. Any desert tortoise located during fence clearance surveys shall be handled only by the Designated Biologist(s) in accordance with the USFWS' 2009 Desert Tortoise Field Manual.
 - 1) **Timing, Supervision of Fence Installation.** The exclusion fencing shall be installed prior to the onset of site clearing and grubbing. During construction, temporary tortoise exclusion fencing shall also be placed on access roads in tortoise habitat unless otherwise approved by the CPM, Western, BLM, USFWS, and CDFG. The fence installation shall be supervised by the Designated Biologist and monitored by the Biological Monitors to ensure the safety of any tortoise present.
 - 2) **Fence Material and Installation.** The permanent tortoise exclusionary fencing shall be constructed in accordance with the USFWS' 2009 Desert Tortoise Field Manual (Chapter 8 – Desert Tortoise Exclusion Fence).
 - 3) **Security Gates.** Security gates shall be designed with minimal ground clearance to deter ingress by tortoises. The gates may be electronically activated to open and close immediately after the vehicle(s) have entered or exited to prevent the gates from being kept open for long periods of time. Cattle grating designed to safely exclude desert tortoise may be installed at the gated entries to discourage tortoises from gaining entry, to be determined by the CPM in consultation with CDFG and USFWS.
 - 4) **Fence Inspections.** Following installation of all desert tortoise exclusion fencing (i.e., both permanent and temporary fencing), the fencing shall be regularly inspected. If tortoises were moved out of harm's way during fence construction, permanent and temporary fencing in that area shall be inspected at least two times a day for a minimum of 7 days after moving the animal to ensure a recently moved tortoise has not been trapped within the fence. Thereafter, permanent fencing shall be inspected monthly and during and within 24 hours following all major rains. Major rains are defined as a storm(s) for which surface flow is detectable within the fenced drainages. Any damage to the fencing shall be temporarily repaired immediately to keep tortoises from entering the site, and permanently repaired within 48 hours of observing damage. Monthly and post-rainfall inspections of permanent site fencing shall continue throughout the life of the project. Temporary fencing shall be inspected weekly and, where drainages intersect the fencing, during and within 24 hours following major rains. All temporary fencing shall be repaired immediately upon discovery and the Designated Biologist shall inspect the area to determine whether the damage may have permitted tortoise entry.
 - B) **Desert Tortoise Clearance Surveys within the Plant Site.** Following construction of the tortoise exclusion fencing, the solar field and adjacent fenced areas (including permanent and temporarily fenced areas) shall be cleared of tortoises by the Designated Biologist, who may be assisted by the Biological Monitors. Clearance surveys shall be conducted in accordance with the USFWS 2009 Desert Tortoise Field Manual (Chapter 6 – Clearance Survey Protocol for the Desert Tortoise – Mojave Population) and shall consist of at least two surveys covering 100 percent of the project area by walking transects no more than 15 feet apart. Surveys shall be repeated until two consecutive 100%-coverage surveys are completed without finding live tortoises. Transect routes on each separate survey shall be walked in different directions to allow opposing angles of observation. Clearance surveys of the power plant site may only be conducted when tortoises are most active (April through May or September through
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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October). Surveys outside of these time periods require approval by USFWS and CDFG. Any tortoise located during clearance surveys of the solar field site or construction areas along the transmission line route shall be relocated and monitored in accordance with the Desert Tortoise Translocation Plan (Condition of Certification BIO-15).

- 1) **Burrow Searches.** During clearance surveys all desert tortoise burrows, and any burrows constructed by other species that might be used by desert tortoises, shall be examined by the Designated Biologist, who may be assisted by the Biological Monitors, to assess occupancy of each burrow by desert tortoises and handled in accordance with the USFWS' 2009 Desert Tortoise Field Manual. To prevent reentry by a tortoise or other wildlife, all burrows shall be collapsed once absence has been determined. Tortoises taken from burrows and from elsewhere on the solar field site or construction areas along the transmission line route shall be translocated as described in the Desert Tortoise Translocation Plan.
- 2) **Burrow Excavation/Handling.** All potential desert tortoise burrows located during clearance surveys shall be excavated by hand, tortoises removed, and burrows collapsed or blocked to prevent occupation by desert tortoises. All desert tortoise handling and removal, and burrow excavations, including nests, shall be conducted by the Designated Biologist, who may be assisted by a Biological Monitor in accordance with the USFWS' 2009 Desert Tortoise Field Manual.
- 3) **Monitoring Following Clearing.** Following the desert tortoise clearance and removal from the power plant site and utility corridor, workers and heavy equipment shall be allowed to enter the project site to perform clearing, grubbing, leveling, and trenching. A Designated Biologist shall monitor clearing and grading activities to find and move any tortoises which may have been missed during the initial tortoise clearance survey. Should a tortoise be discovered, it shall be translocated as described in the Desert Tortoise Translocation Plan to an area approved by the Designated Biologist.
- 4) **Relocation of Other Special-Status Species.** Any special-status mammal or reptile species incidentally encountered during desert tortoise clearance surveys or monitoring (2 and 3, above), excluding American badger or desert kit fox, shall be captured and relocated to a safe, suitable area beyond the construction impact zone. If American badger or desert kit fox are encountered during the clearance surveys, they will be avoided and allowed to escape from the site as described below (Condition of Certification BIO-20). Any captured animal shall be maintained in a shaded, sheltered, cool (<85 degrees F) environment until relocation. If capture is not safe or feasible (e.g., for a badger) appropriate measures will be taken to encourage the animal to leave the site (including temporary exclusion fence removal, if monitored closely, per incident-specific direction from the CPM and cooperating agencies). The Designated Biologist shall coordinate with staff and CDFG biologists in the transport and relocation of any special-status animals encountered during project surveys, construction, or operation. A written report documenting any animals relocated shall be provided to the CPM within 30 days of relocation.
- 5) **Reporting.** The Designated Biologist shall record the following information for any desert tortoises handled: a) the locations (narrative and maps) and dates of observation; b) general condition and health, including injuries, state of healing and whether desert tortoise voided their bladders; c) location moved from and location moved to (using GPS technology); d) gender, carapace length, and diagnostic markings (i.e., identification numbers or marked lateral scutes); e) ambient temperature when handled and released; and f) digital photograph of each handled desert tortoise. Desert tortoises moved from within project areas shall be monitored in accordance with the Desert Tortoise Translocation Plan.

Verification: All mitigation measures and their implementation methods shall be included in the BRMIMP and implemented by the project owner. Implementation of the measures shall be reported in the Monthly Compliance Reports by the Designated Biologist. Within 30 days after completion of desert tortoise clearance surveys the Designated Biologist shall submit a report to the CPM, Western, BLM, USFWS, and CDFG describing implementation of each of the mitigation measures listed above. The report shall include the desert tortoise survey results, capture and release locations of any relocated desert tortoises or other animals, and any other information needed to demonstrate compliance with the measures described above.

BIO-15: The project owner shall prepare and implement a final Desert Tortoise Translocation Plan (Plan) in conformance with standards and guidelines described in Translocation of Desert Tortoises (Mojave Population) From Project Sites: Plan Development Guidance (USFWS August 2010), any more current guidance or recommendations as available from CDFG or USFWS, and meets the approval of the CPM in consultation with Western, BLM, USFWS, and CDFG. The goal of the Plan shall be to safely exclude desert tortoises from within the fenced project area and translocate them to suitable habitat capable of supporting them, while minimizing stress and potential for disease transmission. The final Plan shall be based on the draft Desert Tortoise Relocation/Translocation Plan prepared by the applicant and shall include all revisions deemed necessary by USFWS, CDFG, and the CPM, in consultation with Western and BLM. The Plan shall include but not be limited to, a list of the authorized handlers, protocols for disease testing and assessing tortoise health, proposed translocation locations and procedures, schedule of translocations, a habitat assessment of translocation lands, monitoring of translocated tortoise(s), reporting, and contingency planning (e.g., handling an injured or diseased tortoise).

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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Verification: Within 30 days of publication of the Energy Commission License Decision the project owner shall provide the CPM with the final version of a Desert Tortoise Translocation Plan that is consistent with all terms and conditions of the Biological Opinion and Incidental Take Permits, both yet to be issued. The Plan shall not be accepted as “final” until it has been reviewed and approved by the CPM, USFWS, and CDFG in consultation with Western and BLM. Any modifications to the approved final Plan shall be made only with written approval by the CPM, USFWS, and CDFG in consultation with Western and BLM.

Within 30 days after initiation of translocation activities, the Designated Biologist shall provide to the CPM for review and approval in consultation with Western, USFWS, BLM, and CDFG, a written report identifying which items of the final Desert Tortoise Translocation Plan have been completed, and a summary of any modifications to measures made during implementation of the Plan. Written monthly progress reports shall be provided to the CPM for the duration of the Plan implementation. Progress reports shall be made available to Western, BLM, CDFG, and USFWS upon request.

BIO-16: The project owner shall provide compensatory mitigation acreage of 1,522 acres of desert tortoise habitat lands, adjusted to reflect the final project footprint, as specified in this condition. All or a portion of this compensation land may consist of land currently held by the project owner, pending analysis of its suitability (see Selection Criteria, below), as discussed in the analysis of impacts to desert tortoise, in the SA/DEIS. In addition, the project owner shall provide funding for initial improvement and long-term maintenance, enhancement, and management of the compensation lands for protection and enhancement of desert tortoise populations, and comply with other related requirements of this condition. This acreage was calculated as follows: Impacts to the solar generator site shall be compensated at a 1:1 ratio. Impacts along the generator tie-line and at the interconnector substation shall be compensated at a 3:1 ratio (see [Applicant's Opening Testimony, Part 2, October 22 2010]). These impact acreages are to be adjusted to reflect the final project footprint. For purposes of this condition, the Project footprint means all lands disturbed in the construction and operation of the Project, including all linear project components, as well as undeveloped areas inside the Project's boundaries that will no longer provide viable long-term habitat for the desert tortoise.

Costs of these requirements are estimated to be \$3,888,055.50 based on the acquisition of 1,522 (see Biological Resources Table 6 in the SA/DEIS for a list of acquisition and management costs and Exhibit 211 Revised Biological Resources Table 10, for calculations of total estimated habitat compensation costs).

As many as 37 acres (based on staff's estimate of generator tie-line and interconnector substation acreage on public land) of the compensation lands requirement may be satisfied by applicant's compliance with the desert tortoise habitat acquisition or enhancement requirements of BLM, to be calculated as an acre-for-acre offset in the Energy Commission requirement for mitigation provided to satisfy BLM's requirements. For purposes of this paragraph, credit will be given for BLM-required mitigation without regard to whether BLM uses the mitigation funds for habitat acquisition or for enhancement projects to benefit the species.

The project owner shall provide financial assurances as described below in the amount of \$3,888,055.50. In lieu of acquiring lands itself, the Project owner may satisfy the requirements of this condition by depositing funds into a Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF), as described below. If the Project owner elects to establish a REAT NFWF Account and have NFWF and the agencies complete the required habitat compensation, then the total estimated cost of complying with this condition is \$4,002,559.17. The amount of security or NFWF deposit shall be adjusted up or down to reflect any revised cost estimates recommended by REAT.

The actual costs to comply with this condition will vary depending on the final footprint of the Project, the costs of acquiring compensation habitat, the costs of initially improving the habitat, and the actual costs of long-term management as determined by a Property Analysis Report or similar analysis (below). The 1,522 acre habitat requirement, and associated funding requirements based on that acreage, shall be adjusted up or down if there are changes in the final footprint of the project or the associated costs of evaluation, acquisition, management, and other factors listed in Biological Resources Tables 6 in the SA/DEIS and Exhibit 211 Revised Biological Resources Table 10). Regardless of actual cost, the project owner shall be responsible for funding all requirements of this condition.

COMPENSATORY MITIGATION LAND ACQUISITION

- A) Method of Acquisition. Compensation lands shall be acquired by either of the two options listed below. Regardless of the method of acquisition, the transaction shall be complete only upon completion of all terms and conditions described in this Condition of Certification.
 - 1) The project owner shall transfer title and/or conservation easement of compensation lands to a state or federal land management agency or to a third-party non-profit land management organization, as approved by the CPM in consultation with BLM, CDFG, and USFWS; staff recommends transfer in fee title to the lands to CDFG under terms approved by CDFG. Alternatively, a CDFG-approved non-profit organization qualified pursuant to California Government Code Section 65965 may hold the fee title or a conservation easement over the lands. In the event an approved non-profit holds title, a conservation easement shall be recorded in favor of CDFG in a
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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<p>form approved by CDFG; in the event an approved non-profit holds a conservation easement over the lands, CDFG shall be named third party beneficiary; or</p> <p>2) The Project owner shall deposit funds into a project-specific subaccount within the REAT Account established with the NFWF, in the amount as indicated in Biological Resources Tables 6 in the SA/DEIS and Exhibit 211 Revised Biological Resources Table 10 (adjusted to reflect final project footprint and any applicable REAT adjustments to costs).</p> <p>B) Selection Criteria for Compensation Lands. Pending a review of the selection criteria below, staff has tentatively determined, in consultation with Western, CDFG, BLM, and USFWS, that applicant-owned land contiguous to the solar generator site would meet criteria as mitigation lands to partially satisfy this Condition of Certification. Any additional or alternate compensation lands selected for acquisition to meet Energy Commission and CESA requirements shall be equal to or better than the quality and function of the habitat impacted and shall:</p> <ol style="list-style-type: none"> 1) be within the Colorado Desert Recovery Unit, with potential to contribute to desert tortoise habitat connectivity and build linkages between desert tortoise designated critical habitat, known populations of desert tortoise, and/or other preserve lands; 2) provide habitat for desert tortoise with capacity to regenerate naturally when disturbances are removed; 3) be near larger blocks of lands that are either already protected or planned for protection, or which could feasibly be protected long-term by a public resource agency or a non-governmental organization dedicated to habitat preservation; 4) be contiguous and biologically connected to lands currently occupied by desert tortoise, ideally with populations that are stable, recovering, or likely to recover; 5) not have a history of intensive recreational use or other disturbance that might cause future erosional damage or other habitat damage, and make habitat recovery and restoration infeasible; 6) not be characterized by high densities of invasive species, either on or immediately adjacent to the parcels under consideration, that might jeopardize habitat recovery and restoration; and 7) not contain hazardous wastes that cannot be removed to the extent that the site could not provide suitable habitat; and 8) have water and mineral rights included as part of the acquisition, unless the CPM, in consultation with CDFG, BLM and USFWS, agrees in writing to the acceptability of land without these rights. <p>C) Review and Approval of Compensation Lands Prior to Acquisition. The project owner shall submit a formal acquisition proposal to the CPM describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands for desert tortoise in relation to the criteria listed above and must be approved by the CPM. The CPM will share the proposal with and consult with Western, CDFG, BLM and the USFWS before deciding whether to approve or disapprove the proposed acquisition.</p> <p>D) Compensation Lands Acquisition Conditions: The project owner shall comply with the following conditions relating to acquisition of the compensation lands after the CPM, in consultation with Western, CDFG, BLM and the USFWS, have approved the proposed compensation lands:</p> <ol style="list-style-type: none"> 1) Preliminary Report: The Project owner, or approved third party, shall provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary or requested documents for the proposed compensation land to the CPM. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the CPM, in consultation with Western, CDFG, BLM and the USFWS. For conveyances to the State, approval may also be required from the California Department of General Services, the Fish and Game Commission, and the Wildlife Conservation Board. 2) Title/Conveyance: The Project owner shall acquire and transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement as required by the CPM in consultation with CDFG. Any transfer of a conservation easement or fee title must be to CDFG, a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), or to BLM or other public agency approved by the CPM in consultation with CDFG. If an approved non-profit organization holds fee title to the compensation lands, a conservation easement shall be recorded in favor of CDFG or another entity approved by the CPM. If an approved non-profit holds a conservation easement, CDFG shall be named a third party

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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	beneficiary. If an entity other than CDFG holds a conservation easement over the compensation lands, the CPM may require that CDFG or another entity approved by the CPM, in consultation with CDFG, be named a third party beneficiary of the conservation easement. The Project owner shall obtain approval of the CPM, in consultation with CDFG, of the terms of any transfer of fee title or conservation easement to the compensation lands.
3)	Property Analysis Record. Upon identification of the compensation lands, the Project owner shall conduct a Property Analysis Record (PAR) or PAR-like analysis to establish the appropriate amount of the long-term maintenance and management fund to pay the in-perpetuity management of the compensation lands. The PAR or PAR-like analysis must be approved by the CPM, in consultation with CDFG, before it can be used to establish funding levels or management activities for the compensation lands.
E)	Compensation Lands Acquisition Costs: The Project owner shall pay all other costs related to acquisition of compensation lands and conservation easements. In addition to actual land costs, these acquisition costs shall include but shall not be limited to the items listed below. Management costs including site cleanup measures are described separately, in the following section.
1)	Level 1 Environmental Site Assessment;
2)	Appraisal;
3)	Title and document review costs;
4)	Expenses incurred from other state, federal, or local agency reviews;
5)	Closing and escrow costs;
6)	Overhead costs related to providing compensation lands to CDFG or an approved third party;
7)	Biological survey(s) to determine mitigation value of the land; and
8)	Agency costs to accept the land (e.g., writing and recording of conservation easements; title transfer).
<u>COMPENSATORY MITIGATION LAND IMPROVEMENT</u>	
A)	Land Improvement Requirements: The Project owner shall fund activities that the CPM, in consultation with Western, CDFG, USFWS and BLM, requires for the initial protection and habitat improvement of the compensation lands. These activities will vary depending on the condition and location of the land acquired, but may include surveys of boundaries and property lines, installation of signs, trash removal and other site cleanup measures, construction and repair of fences, invasive plant removal, removal of roads, and similar measures to protect habitat and improve habitat quality on the compensation lands.
The costs of these activities are estimated at \$250 an acre, but will vary depending on the measures that are required for the compensation lands. A non-profit organization, CDFG or another public agency may hold and expend the habitat improvement funds if it is qualified to manage the compensation lands (pursuant to California Government Code section 65965), if it meets the approval of the CPM in consultation with CDFG, and if it is authorized to participate in implementing the required activities on the compensation lands. If CDFG takes fee title to the compensation lands, the habitat improvement fund must be paid to CDFG or its designee.	
<u>COMPENSATORY MITIGATION LAND LONG-TERM MANAGEMENT</u>	
A)	Long-term Management Requirements: Long-term management is required to ensure that the compensation lands are managed and maintained to protect and enhance habitat for desert tortoise. Management activities may include maintenance of signs, fences, removal of invasive weeds, monitoring, security and enforcement, and control or elimination of unauthorized use.
B)	Long-term Management Plan. The project owner shall pay for the preparation of a Management Plan for the compensation lands. The Management Plan shall reflect site-specific enhancement measures on the acquired compensation lands. The plan shall be submitted for approval of the CPM, in consultation with Western, CDFG, BLM and USFWS.

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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- C) Long-Term Maintenance and Management Funding. The Project owner shall provide money to fund the long-term maintenance and management of the compensation lands. The amount of money to be paid will be determined through an approved PAR or PAR-like analysis conducted for the compensation lands. The amount of required funding is initially estimated to be \$1,450 for every acre of compensation lands. If compensation lands will not be identified and a PAR or PAR-like analysis completed within the time period specified for this payment (see the verification section at the end of this condition), the Project owner shall provide initial payment of \$2,206,900.00, calculated at \$1,450 an acre for 1,522 acres, into an account for long-term maintenance and management of compensation lands. The amount of the required initial payment or security for this item shall be adjusted for any change in the Project footprint as described above. If an initial payment is made based on the estimated per-acre costs, the project owner shall deposit additional money as may be needed to provide the full amount of long-term maintenance and management funding indicated by a PAR or PAR-like analysis, once the analysis is completed and approved. If the approved analysis indicates less than \$1,450 an acre will be required for long-term maintenance and management, the excess paid will be returned to the Project owner.

The project owner must obtain the CPM's approval of the entity that will receive and hold the long-term maintenance and management fund for the compensation lands. The CPM will consult with the project owner and CDFG before deciding whether to approve an entity to hold the project's long-term maintenance and management funds on any lands. The CPM, in consultation with the project owner and CDFG, may designate another state agency or non-profit organization to hold the long-term maintenance and management fee if the organization is qualified to manage the compensation lands in perpetuity.

If CDFG takes fee title to the compensation lands, CDFG shall determine whether it will hold the long-term management fee in the special deposit fund, leave the money in the REAT Account, or designate another entity to manage the long-term maintenance and management fee for CDFG and with CDFG supervision.

The Project owner shall ensure that an agreement is in place with the long-term maintenance and management fee holder/manager to ensure the following conditions:

- A) Interest. Interest generated from the initial capital shall be available for reinvestment into the principal and for the long-term operation, management, and protection of the approved compensation lands, including reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and any other action approved by CDFG designed to protect or improve the habitat values of the compensation lands.
- B) Withdrawal of Principal. The long-term maintenance and management fee principal shall not be drawn upon unless such withdrawal is deemed necessary by the CPM, in consultation with CDFG, or the approved third-party long-term maintenance and management fee manager to ensure the continued viability of the species on the compensation lands. If CDFG takes fee title to the compensation lands, monies received by CDFG pursuant to this provision shall be deposited in a special deposit fund established solely for the purpose to manage lands in perpetuity unless CDFG designates NFWF or another entity to manage the long-term maintenance and management fee for CDFG.
- C) Pooling Funds. A CPM- approved non-profit organization qualified to hold long-term maintenance and management fees solely for the purpose to manage lands in perpetuity, may pool the fund with other funds for the operation, management, and protection of the compensation lands for local populations of desert tortoise. However, for reporting purposes, the long-term maintenance and management fee fund must be tracked and reported individually to the CDFG and CPM.
- D) Reimbursement Fund. The project owner shall provide reimbursement to CDFG or an approved third party for reasonable expenses incurred during title, easement, and documentation review; expenses incurred from other State or State-approved federal agency reviews; and overhead related to providing compensation lands.

COMPENSATORY MITIGATION LAND SECURITY

- A) Compensation Mitigation Security: The project owner shall provide security sufficient for funding acquisition, improvement, and long-term management of desert tortoise compensation land. Financial assurance can be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security"). Prior to submitting the Security to the CPM, the Project owner shall obtain the CPM's approval, in consultation with CDFG, BLM and the USFWS, of the form of the Security.

The security amount shall be based on the estimates provided in Biological Resources Tables 6 in the SA/DEIS and Exhibit 211 Revised Biological Resources Table 10. This amount shall be updated and verified prior to payment and shall be adjusted to reflect actual costs or more current estimates as agreed upon by the REAT agencies.

The Project owner shall provide verification that financial assurances have been established to the CPM with copies of the document(s) to BLM, CDFG and the USFWS, to guarantee

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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that an adequate level of funding is available to implement any of the mitigation measures required by this condition that are not completed prior to the start of ground-disturbing activities described in Section A of this condition.

In the event that the project owner defaults on the Security, the CPM may use money from the Security solely for implementation of the requirements of this condition. The CPM's use of the security to implement measures in this condition may not fully satisfy the Project owner's obligations under this condition. Any amount of the Security that is not used to carry out mitigation shall be returned to the Project owner upon successful completion of the associated requirements in this condition.

Security for the requirements of this condition shall be provided in the amount of \$3,888,055.50 (or \$4,002,559.17 if the project owner elects to use the REAT Account with NFWF pursuant to paragraph 2 of this condition, below). The Security is calculated in part from the items that follow but adjusted as specified below (consult Biological Resources Tables 6 in the SA/DEIS and Exhibit 211 Revised Biological Resources Table 10 for the complete breakdown of estimated costs). However, regardless of the amount of the security or actual cost of implementation, the project owner shall be responsible for implementing all aspects of this condition.

- 1) Land acquisition costs for compensation land, calculated at \$500/acre;
 - 2) Site assessments, appraisals, biological surveys, transaction closing and escrow costs, calculated as \$18,000 total per parcel (presuming 160 acres per parcel);
 - 3) Initial site clean-up, restoration, or enhancement, calculated at \$250/acre;
 - 4) Third-party and agency administrative transaction costs and overhead, calculated as percentages of land cost;
 - 5) Long-term management and maintenance fund, calculated at \$1,450 per acre; and
 - 6) NFWF fees to establish a project-specific account; manage the sub-account for acquisition and initial site work; and manage the sub-account for long term management and maintenance.
- B) The project owner may elect to comply with some or all of the requirements in this condition by providing funds to implement the requirements into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF). To use this option, the Project owner must make an initial deposit to the REAT Account in an amount equal to the estimated costs of implementing the requirement (as set forth in the Security section of this condition, paragraph 1, above). If the actual cost of the acquisition, initial protection and habitat improvements, long-term funding or other cost is more than the estimated amount initially paid by the project owner, the project owner shall make an additional deposit into the REAT Account sufficient to cover the actual acquisition costs, the actual costs of initial protection and habitat improvement on the compensation lands, the long-term funding requirements as established in an approved PAR or PAR-like analysis, or the other actual costs that are estimated in the table. If those actual costs or PAR projections are less than the amount initially transferred by the applicant, the remaining balance shall be returned to the project owner.
- C) The responsibility for acquisition of compensation lands may be delegated to a third party other than NFWF, such as a non-governmental organization supportive of desert habitat conservation, by written agreement of the Energy Commission. Such delegation shall be subject to approval by the CPM, in consultation with CDFG, BLM and USFWS, prior to land acquisition, enhancement or management activities. Agreements to delegate land acquisition to an approved third party, or to manage compensation lands, shall be executed and implemented within 18 months of the Energy Commission's certification of the project.
- D) The project owner may request the CPM to provide it with all available information about any funds held by the Energy Commission, CDFG, or NFWF as project security, or funds held in a NFWF sub-account for this project, or other project-specific account held by a third party. The CPM shall also fully cooperate with any independent audit that the project owner may choose to perform on any of these funds.

Verification: The project owner shall provide the CPM with written notice of intent to start ground disturbance at least 30 days prior to the start of ground-disturbing activities on the project site.

If the mitigation actions required under this condition are not completed at least 30 days prior to the start of ground-disturbing activities, the Project owner shall provide verification to the CPM and CDFG that an approved Security has been established in accordance with this condition of certification no later than 30 days prior to beginning Project ground-disturbing activities. Financial assurance can be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security"). Prior to

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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submitting the Security to the CPM, the project owner shall obtain the CPM's approval, in consultation with Western, CDFG, BLM and the USFWS, of the form of the Security. The project owner, or an approved third party, shall complete and provide written verification to the CPM, Western, CDFG, BLM and USFWS of the compensation lands acquisition and transfer within 18 months of the start of Project ground-disturbing activities.

No later than 12 months after the start of ground-disturbing project activities, the project owner shall submit a formal acquisition proposal to the CPM describing the parcels intended for purchase or transfer, and shall obtain approval from the CPM, in consultation with Western, CDFG, BLM and USFWS, prior to the acquisition. If NFWF or another approved third party is handling the acquisition, the project owner shall fully cooperate with the third party to ensure the proposal is submitted within this time period. The project owner or an approved third party shall complete the acquisition and all required transfers of the compensation lands, and provide written verification to the CPM, Western, CDFG, BLM and USFWS of such completion, no later than 18 months after the issuance of the Energy Commission Decision. If NFWF or another approved third party is being used for all or part of the acquisition, the project owner shall ensure that funds needed to accomplish the acquisition are transferred in timely manner to facilitate the planned acquisition and to ensure the land can be acquired and transferred prior to the 18-month deadline.

The project owner shall complete and submit to the CPM a PAR or PAR-like analysis no later than 60 days after the CPM approves compensation lands for acquisition associated with any phase of construction. The project owner shall fully fund the required amount for long-term maintenance and management of the compensation lands for that phase of construction no later than 30 days after the CPM approves a PAR or PAR-like analysis of the anticipated long-term maintenance and management costs of the compensation lands. Written verification shall be provided to the CPM and CDFG to confirm payment of the long-term maintenance and management funds.

No later than 60 days after the CPM determines what activities are required to provide for initial protection and habitat improvement on the compensation lands for any phase of construction, the project owner shall make funding available for those activities and provide written verification to the CPM of what funds are available and how costs will be paid. Initial protection and habitat improvement activities on the compensation lands for that phase of construction shall be completed, and written verification provided to the CPM, no later than six months after the CPM's determination of what activities are required on the compensation lands.

The project owner, or an approved third party, shall provide the CPM, Western, CDFG, BLM and USFWS with a management plan for the compensation lands within 180 days of the land or easement purchase, as determined by the date on the title. The CPM, in consultation with Western, CDFG, BLM and the USFWS, shall approve the management plan after its content is acceptable to the CPM.

Within 90 days after completion of all project related ground disturbance, the project owner shall provide to the CPM, CDFG, BLM and USFWS an analysis, based on aerial photography, with the final accounting of the amount of habitat disturbed during Project construction. If this analysis shows that more lands were disturbed than was anticipated in this condition, the project owner shall provide the Energy Commission with additional compensation lands and funding commensurate with the added impacts and applicable mitigation ratios set forth in this condition. A final analysis of all project related ground disturbance may not result in a reduction of compensation requirements if the deadlines established under this condition for transfer of compensation lands and funding have passed prior to completion of the analysis.

BIO-17: The project owner shall prepare and implement a Raven Monitoring, Management, and Control Plan (Raven Plan) that shall be consistent with the most current USFWS-approved raven management guidelines and that meets the approval of the CPM in consultation with Western, BLM, USFWS, and CDFG. The draft Raven Plan submitted by the applicant (Appendix B of CH2MHill 2010c) shall provide the basis for the final plan, subject to review, revisions and approval from the CPM in consultation with Western, BLM, USFWS, and CDFG. The purpose of the plan shall be to avoid any Project-related increases in raven numbers or activity during construction, operation, and decommissioning. The Plan shall address all project components and their potential effects on raven numbers and activity, including but not limited to the solar generator site, temporary logistics and lay down areas, generator tie-line alignment, and distribution line. The threshold for implementation of raven control measures shall be any increases in raven numbers from baseline conditions, as detected by monitoring to be implemented pursuant to the Plan. Regardless of raven monitoring results, the project owner shall be responsible for all other aspects of raven management described in the Plan, including avoidance and minimization of project-related trash, water sources, or perch/roost sites that could contribute to increased raven numbers, throughout the life of the project. In addition, to offset the cumulative contributions of the Project to desert tortoise from increased raven numbers, the Project owner shall also contribute to the USFWS Regional Raven Management Program. The Project owner shall do all of the following:

- A) Prepare and Implement a Raven Management Plan that shall include, but shall not be limited to the following components:
 - 1) Identify conditions potentially associated with the Project that might provide raven subsidies or attractants;
 - 2) Describe management practices to avoid or minimize conditions that might increase raven numbers and predatory activities;
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure
<p>3) Specify a program to monitor raven presence in the Project vicinity and detect any increase in numbers or activity;</p> <p>4) Specify raven activity thresholds for implementation of control measures;</p> <p>5) Describe control practices for ravens to be implemented as needed based on that monitoring results;</p> <p>6) Address monitoring and nest removal during construction and for the life of the Project; and</p> <p>7) Describe reporting schedules and requirements; for the first year of reporting the project owner shall provide quarterly reports describing implementation of the Plan; thereafter the reports shall be submitted annually for the life of the project.</p> <p>B) Contribute to the USFWS Regional Raven Management Program. The project owner shall submit payment to the project sub-account of the REAT Account held by the National Fish and Wildlife Foundation (NFWF) to support the USFWS Regional Raven Management Program. The amount shall be a one-time payment of \$105 per acre of long-term or permanent disturbance (totaling \$152,040.00 for disturbance area of 1,448 acres, to be adjusted according to final project footprint).</p> <p>No later than 30 days prior to the start of construction, the project owner shall provide written verification to the CPM that NFWF has received and accepted payment into the project's sub-account of the REAT Account to support the USFWS Regional Raven Management Program.</p> <p>No later than 30 days prior to any construction-related ground disturbance activities, the Project owner shall provide the CPM, USFWS, and CDFG with the final version of a Raven Management Plan. All modifications to the approved Raven Management Plan shall be made only with approval of the CPM in consultation with Western, BLM, USFWS and CDFG.</p> <p>Within 30 days after completion of Project construction, the Project owner shall provide to the CPM for review and approval, a written report identifying which items of the Raven Management Plan have been completed, a summary of all modifications to mitigation measures made during the Project's construction phase, and which items are still outstanding.</p> <p>On January 31st of each year following construction the Designated Biologist shall provide a report to the CPM that includes: a summary of the results of raven management and control activities for the year; a discussion of whether raven control and management goals for the year were met; and recommendations for raven management activities for the upcoming year.</p>
<p>BIO-18: The Project owner shall implement the following measures to avoid or minimize Project-related construction impacts to golden eagles.</p> <p>A) Annual Inventory During Construction. For each year during which construction will occur an inventory shall be conducted to determine if golden eagle territories occur in the area surrounding the solar generator site and generator tie-line alignment. Specific distances from the project facilities to be covered during field surveys shall be no less than one mile and shall be determined in consultation among the CPM, USFWS, CDFG, BLM and Western and stated in the Avian and Bat Protection Plan (see Condition of Certification BIO-25). Survey methods for the inventory shall be as described in the Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations (Pagel et al. 2010) or more current guidance from the USFWS.</p> <p>B) Inventory Data: Data collected during the inventory shall include at least the following: territory status (unknown, vacant, occupied, breeding successful, breeding unsuccessful); nest location, nest elevation; age class of golden eagles observed; nesting chronology; number of young at each visit; digital photographs; and substrate upon which nest is placed.</p> <p>C) Determination of Unoccupied Territory Status: A nesting territory or inventoried habitat shall be considered unoccupied by golden eagles only after completing at least two full aerial surveys in a single breeding season. In circumstances where ground observation occurs rather than aerial surveys, at least two ground observation periods lasting at least four hours are necessary to designate an inventoried habitat or territory as unoccupied as long as all potential nest sites and alternate nests are visible and monitored. These observation periods shall be at least 30 days apart for an inventory, and at least 30 days apart for monitoring of known territories.</p> <p>D) Monitoring and Adaptive Management Plan: If an occupied nest (as defined by Pagel et al. 2010) is detected in the area surrounding the solar generator site or generator tie-line alignment, the Project owner shall prepare and implement a Golden Eagle Monitoring and Management Plan for the duration of construction to ensure that Project construction activities do not result in injury or disturbance to golden eagles. The monitoring methods shall be consistent with those described in the Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations (Pagel et al. 2010) or more current guidance from the USFWS. The Monitoring and Management Plan</p>

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

shall be prepared in consultation with the USFWS. Triggers for adaptive management shall include any evidence of Project-related disturbance to nesting golden eagles, including but not limited to: agitation behavior (displacement, avoidance, and defense); increased vigilance behavior at nest sites; changes in foraging and feeding behavior, or nest site abandonment. The Monitoring and Management Plan shall include a description of adaptive management actions, which shall include, but not be limited to, cessation of construction activities that are deemed by the Designated Biologist to be the source of golden eagle disturbance.

Verification: No fewer than 30 days from completion of the golden eagle inventory the Project owner shall submit a report to the CPM, Western, CDFG, BLM, and USFWS documenting the results of the inventory.

If an occupied nest is detected in the area surrounding the solar generator site or generator tie-line alignment, then at least 30 days prior to the start of any pre-construction site mobilization the project owner shall provide the CPM, Western, BLM, CDFG, and USFWS with the final version of the golden eagle monitoring and management plan. This final plan shall have been reviewed and approved by the CPM, USFWS, and Western in consultation with BLM, and CDFG. If no occupied nests are detected during the inventory and a plan is not warranted, a letter from USFWS documenting this determination shall be submitted to the CPM and Western at least 10 days prior to the start of any pre-construction site mobilization.

BIO-19: The project owner shall implement the following measures to avoid and offset impacts to burrowing owls. Nothing in this condition requires the project owner to conduct burrowing owl surveys by entering private lands adjacent to the project site when the project owner has made reasonable attempts to obtain permission to enter the property for survey work but was unable to obtain such permission. In this situation only, the project owner may substitute binocular surveys for protocol field surveys.

- A) Pre-Construction Surveys. Concurrent with desert tortoise clearance surveys, the Designated Biologist shall conduct pre-construction surveys for burrowing owls no more than 30 days prior to the start of ground disturbing activities in any part of the project area. Surveys shall be conducted within the project site and along all linear facilities in accordance with CDFG guidelines (CBOC 1993). Surveys shall also be completed within 500 feet of all project disturbances.
 - B) Implement Avoidance Measures. If an active burrowing owl burrow is detected within 500 feet from the Project Disturbance Area the following avoidance and minimization measures shall be implemented:
 - 1) Establish Non-Disturbance Buffer. Fencing shall be installed at a 250-foot radius from the occupied burrow to create a non-disturbance buffer around the burrow. The non-disturbance buffer and fence line may be reduced to 160 feet if all Project-related activities that might disturb burrowing owls would be conducted during the non-breeding season (September 1st through January 31st). Signs shall be posted in English and Spanish at the fence line indicating no entry or disturbance is permitted within the fenced buffer.
 - 2) Monitoring: If construction activities would occur within 500 feet of the occupied burrow during the nesting season (February 1 – August 31st) the Designated Biologist or Biological Monitor shall monitor to determine if these activities have potential to adversely affect nesting efforts, and shall implement measures to minimize or avoid such disturbance.
 - C) Passive Relocation of Burrowing Owls. If active burrowing owl burrows are detected within the Project Area, the Project owner shall prepare and implement a Burrowing Owl Relocation and Mitigation Plan, in addition to the avoidance measures described above. The final Burrowing Owl Relocation and Mitigation Plan shall be based on the applicant's draft plan (CH2MHill 2010h) revised to incorporate pending review and recommendations by the CPM in consultation with Western, USFWS, BLM and CDFG, and shall:
 - 1) Identify and describe suitable burrow replacement sites within 1 mile of the Project Disturbance Area, and describe measures to ensure that burrow installation or improvements would not affect sensitive species habitat or any burrowing owls already present in the relocation area; burrow replacement sites shall be in areas of suitable habitat for burrowing owl nesting, and be characterized by minimal human disturbance and access. Relative cover of non-native plants within the proposed relocation sites shall not exceed the relative cover of non-native plants in the adjacent habitats;
 - 2) Provide guidelines for creation or enhancement of at least two natural or artificial burrows for each active burrow within the project disturbance area, including a discussion of timing of burrow improvements, specific location of burrow installation, and burrow design. Design of the artificial burrows shall be consistent with CDFG guidelines (CDFG 1995) and shall be approved by the CPM in consultation with Western, CDFG, BLM and USFWS; if artificial burrows are required, they shall be located on applicant-owned lands outside of the project boundary where construction/ development would not occur, and at sufficient distance from the project site to
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure
<p>minimize noise and other disturbance;</p> <p>3) Provide detailed methods and guidance for passive relocation of burrowing owls occurring during non-breeding season within the Project Disturbance Area. Occupied burrows may not be disturbed during the nesting season (February 1 to August 31) to avoid “take” under the MBTA and Fish and Game codes; and</p> <p>4) Describe monitoring and management of the replacement burrow site(s), and provide a reporting plan. The objective shall be to manage the relocation area for the benefit of burrowing owls, with the specific goals of:</p> <p style="padding-left: 20px;">a) Maintaining the functionality of the burrows for a minimum of two years; and</p> <p style="padding-left: 20px;">b) Minimizing the occurrence of weeds (species considered “moderate” or “high” threat to California wildlands as defined by CAL-IPC [2006] and noxious weeds rated “A” or “B” by the California Department of Food and Agriculture and any federal-rated pest plants [CDFA 2009]) at less than 10 percent cover of the shrub and herb layers.</p> <p>D) Surveys of Relocation Area. The Designated Biologist shall survey the relocation area(s) containing the artificial burrows installed in accordance with Item 3 above during the nesting and wintering seasons to assess use of the artificial burrows, using methods consistent with Phase II and Phase III California Burrowing Owl Consortium Guideline protocols (CBOC 1993). Surveys shall start upon completion of artificial burrow construction and shall continue for a period of five years. If survey results indicate burrowing owls are not using the relocation area, remedial actions shall be developed and implemented in consultation with the CPM, Western, BLM, CDFG, and USFWS to correct conditions at the site that might be preventing owls from using it. A report describing survey results and remedial actions taken shall be submitted to the CPM, Western, BLM, CDFG, and USFWS no later than January 31st of each year for five years.</p> <p>E) Acquisition and protection of compensatory mitigation lands for burrowing owls. The Project owner shall provide, in fee or in easement, for the management and protection in perpetuity of 19.5 acres of land for each single burrowing owl or breeding pair or burrowing owls that is displaced by construction of the Project. This compensation acreage of 19.5 acres per single bird or pair of nesting owls assumes that there is no evidence that the compensation lands are occupied by burrowing owls. If burrowing owls are observed to occupy the compensation lands, then only</p>
<p>9.75 acres per single bird or pair is required, per CDFG (1995) guidelines. If the compensation lands are contiguous to currently occupied habitat, then the replacement ratio will be 13.0 acres per pair or single bird.</p>
<p>Compensation land acreage and cost estimates described here are based on the applicant’s report that as many as five single burrowing owls or breeding pairs may occur on the solar generator site and one or two single owls or breeding pairs may occur along the generator tie-line alignment. At 19.5 acres of compensation land per single owl or nesting pair, the project owner shall be responsible for dedicating and protecting 136.5 acres of burrowing owl habitat. This estimated acreage shall be adjusted based upon pre-construction survey data and the occurrence of burrowing owls on proposed compensation lands (above).</p>
<p>The project owner shall transfer fee title or a conservation easement on the compensation lands to CDFG under terms approved by CDFG. Alternatively, a non-profit organization qualified to manage compensation lands (pursuant to California Government Code section 65965) and approved by CDFG and the CPM may hold fee title or a conservation easement over the habitat mitigation lands. If the approved non-profit organization holds title, a conservation easement shall be recorded in favor of CDFG in a form approved by CDFG. If the approved non-profit holds a conservation easement, CDFG shall be named a third party beneficiary. If a Security is provided, the project owner or an approved third party shall complete the proposed compensation lands acquisition within 18 months of the start of project ground-disturbing activities. Acquisition funding shall be based on the adjusted land values at the time of construction. In lieu of acquiring lands itself, the Project owner may satisfy the requirements of this condition by depositing funds into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF), as described in Section 3.i. of Condition of Certification BIO-16.</p>
<p>In addition, the Project owner shall provide funding for the enhancement and long-term management of these compensation lands. The acquisition or easement and subsequent management of the compensation lands may be delegated by written agreement to CDFG or to a third party, such as a non-governmental organization dedicated to habitat conservation, subject to approval by the CPM, in consultation with CDFG, Western, BLM, and USFWS prior to land acquisition or management activities. Management funding shall be based on the adjusted transaction and management expenses at the time of construction to acquire and manage habitat.</p>
<p>1) Criteria for Burrowing Owl Compensation Lands. The terms and conditions of this acquisition or easement shall be as described in Paragraph 1 of BIO-16 (Desert Tortoise Compensatory Mitigation), with the additional criteria to include: 1) the burrowing owl compensation land must provide suitable habitat for burrowing owls, and</p>

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure	
	<p>2) the compensation lands must either currently support burrowing owls or be within dispersal distance from areas occupied by burrowing owls (generally approximately 5 miles). The burrowing owl compensation lands may be included with the desert tortoise compensation lands only if these two burrowing owl criteria are met. If the burrowing owl compensation land is separate from the acquisition required for desert tortoise compensation lands, the Project owner shall fulfill the requirements described below in this condition.</p> <p>2) Security. If the burrowing owl habitat compensation land is separate from the acreage required for desert tortoise compensation lands, then the Project owner or an approved third party shall complete acquisition of the proposed compensation lands prior to initiating ground-disturbing Project activities. Alternatively, financial assurance can be provided by the Project owner to the CPM with copies of the document(s) to Western, CDFG, BLM and the USFWS, to guarantee that an adequate level of funding is available to implement the a. mitigation measure described in this condition. These funds shall be used solely for implementation of the measures associated with the Project. Financial assurance can be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") prior to initiating ground-disturbing Project activities. Prior to submittal to the CPM, the Security shall be approved by the CPM, in consultation with Western, CDFG, BLM and the USFWS to ensure funding. As of the publication of the SA/DEIS, this amount is \$358,701.17 but this amount may change based on land costs or adjustments to the estimated costs of enhancement and endowment (see Biological Resources Table 6 and Compensatory Mitigation Land Security in BIO-16 for a discussion of the assumptions used in calculating the Security, which are based on an estimate of \$2,622 per acre to fund acquisition, enhancement, and long-term management). The final amount due will be determined by the PAR or PAR-like analysis conducted pursuant to BIO-16.</p> <p>Verification: If pre-construction surveys detect burrowing owls or active burrows outside the project disturbance area but within 500 feet of proposed construction activities, the Designated Biologist shall provide to the CPM, CDFG, USFWS, BLM, and Western a Burrowing Owl Monitoring and Mitigation Plan at least 10 days prior to the start of any project-related site disturbance activities. The project owner shall report monthly to the CPM, CDFG, USFWS, BLM, and Western for the duration of construction on the implementation of burrowing owl avoidance and minimization measures described in the Burrowing Owl Monitoring and Mitigation Plan. Within 30 days after completion of construction the project owner shall provide to the CPM, CDFG, USFWS, BLM, and Western a written construction termination report identifying how mitigation measures described in the plan have been completed.</p> <p>If pre-construction surveys detect burrowing owls within 500 feet of proposed construction activities, the Designated Biologist shall provide to the CPM, Western, BLM, CDFG and USFWS documentation indicating that non-disturbance buffer fencing has been installed at least 10 days prior to the start of any construction-related ground disturbance activities. The Project owner shall report monthly to the CPM, Western, CDFG, BLM and USFWS for the duration of construction on the implementation of burrowing owl avoidance and minimization measures. Within 30 days after completion of construction the Project owner shall provide to the CPM, Western, BLM, CDFG and USFWS a written construction termination report identifying how mitigation measures described in the plan have been completed.</p> <p>If pre-construction surveys detect burrowing owls within the Project Disturbance Area, the Project owner shall notify the CPM, Western, BLM, CDFG and USFWS no less than 10 days of completing the surveys that a relocation of owls is necessary. The Project owner shall do all of the following if relocation of one or more burrowing owls is required:</p> <ul style="list-style-type: none"> A) Within 30 days of completion of the burrowing owl pre-construction surveys, submit to the CPM, Western, CDFG and USFWS a Draft Burrowing Owl Relocation and Mitigation Plan. B) No less than 90 days prior to purchase or dedication of the burrowing owl compensation lands, the Project owner, or an approved third party, shall submit a formal acquisition proposal to the CPM, Western, CDFG, and USFWS describing the parcel intended for purchase or dedication. At the same time the Project owner shall submit a PAR or PAR-like analysis for the parcels for review and approval by the CPM, CDFG and USFWS. C) Within 90 days of the purchase or dedication, as determined by the date on the title, the Project owner shall provide the CPM with a management plan for review and approval, in consultation with Western, CDFG, BLM and USFWS, for the compensation lands and associated funds. D) No later than 30 days prior to the start of construction-related ground disturbing activities, the Project owner shall provide written verification of Security in accordance with this condition of certification. E) No later than 18 months after the start of construction-related ground disturbance activities, the Project owner shall provide written verification to the CPM, Western, BLM, CDFG and USFWS that the compensation lands or conservation easements have been acquired and recorded in favor of the approved recipient. F) On January 31st of each year following construction for a period of five years, the Designated Biologist shall provide a report to the CPM, USFWS, BLM and CDFG that

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure
<p>describes the results of monitoring and management of the replacement burrow area. The annual report shall provide an assessment of the status of the replacement burrow area with respect to burrow function and weed infestation, and shall include recommendations for actions the following year for maintaining the burrows as functional burrowing owl nesting sites and minimizing the occurrence of weeds.</p>
<p>BIO-20: Prior to ground disturbance the project owner shall conduct pre-construction surveys for American badgers and desert kit fox. These surveys may be conducted concurrently with the desert tortoise pre-construction surveys (Condition of Certification BIO-14, above). Surveys shall be conducted as described below:</p> <ul style="list-style-type: none"> A) Biological Monitors shall perform pre-construction surveys for badger and kit fox dens throughout the project area, including areas within 250 feet of all project facilities, utility corridors, and access roads. If dens are detected, each den shall be classified as inactive, potentially active, or definitely active. B) Inactive dens within the proposed security and perimeter fences, or that would be directly impacted by any construction activities, shall be excavated by hand and backfilled to prevent reuse by badgers or kit fox. Potentially active dens that would be directly impacted by construction activities shall be monitored by the Biological Monitor for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand. C) If present, occupied badger or kit fox dens shall be flagged; monitored daily to determine whether the den is occupied by a female with young (i.e., a maternity den) and ground-disturbing activities avoided within 100 feet of the den as long as it remains occupied. Maternity dens shall be avoided during the pup-rearing season (15 February through 1 July) and a minimum 200-foot disturbance-free buffer established. Buffers may be modified with the concurrence of CDFG and the CPM. Maternity dens shall be flagged for avoidance, identified on construction maps, and a biological monitor shall be present during any construction activity within 500 feet of the maternity den. D) If avoidance of an occupied non-maternity den is not feasible, badgers or kit foxes shall be passively relocated by slowly excavating the burrow (either by hand or mechanized equipment under the direct supervision of the biologist, removing no more than 4 inches at a time) and allowing the animal to disperse from the site (e.g., by providing a temporary monitored opening in the tortoise exclusion fence and directing the animal toward the opening with temporary plastic construction fencing). Female kit foxes or badgers with young would not be directed off-site until the young are ready to leave the dens. Any forced dispersal of badgers or kit foxes shall occur only after consultation with the CDFG and approval by the CPM. A written report documenting the animal's removal or forced dispersal shall be provided to the CPM within 30 days of relocation. In the event that passive relocation techniques fail for badgers, the Applicant will contact CDFG to explore other relocation options, which may include trapping. <p>Verification: The project owner shall submit a report to the CPM and CDFG within 30 days of completion of badger and kit fox surveys. The report shall describe survey methods, results, further mitigation measures (if any) to be implemented, and shall specify reporting and verification requirements (e.g., CDFG approval for forced dispersal plans) for those measures. Results of any follow-up measures shall be reported to the CPM in monthly and annual compliance reports and on any reporting schedule required or recommended by CDFG.</p>
<p>BIO-21: To allow east-west wildlife passage alongside the highway and to minimize road mortality during project construction, the project owner shall design and build the facility to provide a minimum 100-foot unfenced wildlife passage area south of SR-62 and north of the solar field and any contiguous project components that would interrupt wildlife passage. These include temporary and permanent project components, including but not limited to logistics and lay-down areas, administrative area, cultural resources interpretive site, permanent or temporary fencing, security gate, and any other project component, excluding unfenced linear facilities such as access roads or electrical distribution lines. With the exception of minimal disturbance necessary for linear project features, this wildlife passage area shall consist of undisturbed or revegetated desert shrubland.</p> <p>Verification: The project owner shall submit final plan drawings to the CPM and Western no less than 30 days prior to scheduled commencement of ground-disturbing activities, to indicate the location of the wildlife passage area. No fence construction or other ground-disturbing activities shall proceed within the designated wildlife passage area without written authorization of the CPM.</p>
<p>BIO-22: The project owner shall implement the following measures to avoid, minimize and mitigate for direct and indirect impacts to waters of the State and to satisfy requirements of California Fish and Game Code sections 1600 and 1607.</p> <ul style="list-style-type: none"> A) Eliminate Proposed Storm Water Detention Basins: The project owner shall eliminate the proposed detention basins from the project design. The owner shall design and construct the perimeter road at existing grade in the southern portion of the project site to allow runoff to cross the road freely, as shown in the applicant's Response to CEC Staff Workshop Query 12 (SR 2010a). The project owner may adopt the road design as submitted (SR 2010a) or provide an alternate design to minimize potential for road

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure
<p>damage during heavy rains (e.g., the owner may elect to pave the road or install periodic low-water crossings that would not impede runoff).</p> <p>B) Finalize Acreages of Impacts to State Waters: Staff estimates that 82.8 acres of state-jurisdictional waters would be directly or indirectly impacted by the project. Upon completion of final engineering, the project owner shall review and quantify the project's permanent and long-term impacts to state-jurisdictional waters. The calculated acreage of permanent and long-term impacts shall include all ephemeral drainages impacted by construction within or adjacent to the fenced boundary of the solar field site, including the proposed logistics and lay-down areas and diversion channels, as well as impacts to drainages resulting from the construction or widening of access for new or existing transmission line access road; transmission line tower access; logistics, staging, and lay-down areas; road turnouts; pull sites; interconnection substation; and any other project-related disturbance to jurisdictional waters.</p> <p>C) Acquire Off-Site State Waters: Permanent and long-term impacts to waters of the State shall be mitigated by compensation at a 1:1 ratio. The project owner shall acquire, in fee or in easement, a parcel or parcels of land that includes at least the same acreage of State jurisdictional waters as would be impacted by construction of the project, as determined in Item 1 above. The parcel or parcels comprising the off-site State waters shall include similar vegetation and habitat types as those mapped in the project footprint. The terms and conditions of this acquisition or easement shall be as described in Condition of Certification BIO-16. Mitigation for impacts to State waters shall occur within the surrounding watersheds, as close to the project site as possible. State waters occurring on desert tortoise compensation lands (Condition of Certification BIO-16) may be used to fulfill the requirements of this condition. Additional off-site State waters shall be acquired if desert tortoise compensation lands do not contain the minimum acreage of State waters as required for compliance with this Condition of Certification.</p> <p>D) Preparation and Implementation of Habitat Management Plan for Off-site Compensation Land: The project owner shall prepare and implement a Management Plan that describes site-specific enhancement measures for the acquired compensation lands, as described in Condition of Certification BIO-16. The Management Plan, as developed for Condition of Certification BIO-16, shall include site-specific enhancement measures for all drainages on compensation lands that will be used to fulfill the requirements of this Condition of Certification. Any additional lands beyond those required for compliance with Condition of Certification BIO-16 that may be required for compliance with this Condition of Certification shall also be included in the Management Plan. The management plan shall be submitted for the CPM'S review in consultation with CDFG, Western, and BLM.</p> <p>E) Code of Regulations: The project owner shall provide a copy of the Streambed Impact Minimization and Compensation Measures from the Energy Commission Decision and Western and BLM Records of Decision to all contractors, subcontractors, and the project owner's project supervisors. Copies shall be readily available at work sites at all times during periods of active work and must be presented to any CDFG personnel or personnel from another agency upon demand. The CPM reserves the right to issue a stop work order or allow CDFG to issue a stop work order after giving notice to the project owner and the CPM, if the CPM in consultation with CDFG determines that the project owner has breached any of the terms or conditions or for other reasons, including but not limited to the following:</p> <ol style="list-style-type: none"> 1) The information provided by the project owner regarding streambed alteration is incomplete or inaccurate; 2) New information becomes available that was not known to it in preparing the terms and conditions; or 3) The project or project activities as described in future environmental documentation or in decision documents prepared by the Energy Commission, Western or BLM have changed. <p>F) Best Management Practices: The project owner shall also comply with the following conditions to protect drainages near the Project Disturbance Area:</p> <ol style="list-style-type: none"> 1) The project owner shall not operate vehicles or equipment in ponded or flowing water except as described in this condition. 2) With the exception of the detention basin(s) and drainage control system installed for the project, the installation of bridges, culverts, or other structures shall be such that water flow (velocity and low flow channel width) is not impaired. Bottoms of temporary culverts shall be placed at or below stream channel grade. 3) When any activity requires moving of equipment across a flowing drainage, such operations shall be conducted without substantially increasing stream turbidity. 4) Vehicles driven across ephemeral drainages when water is present shall be completely clean of petroleum residue and water levels shall be below the vehicles' axles. 5) The project owner shall minimize road building, construction activities, and vegetation clearing within ephemeral drainages to the extent feasible for all project

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure	
	components both within and outside the perimeter fence.
6)	The project owner shall not allow water containing mud, silt, or other pollutants from grading, aggregate washing, or other activities to enter off-site state-jurisdictional waters or be placed in locations that may be subjected to high storm flows.
7)	The project owner shall comply with all litter and pollution laws. All contractors, subcontractors, and employees shall also obey these laws, and it shall be the responsibility of the project owner to ensure compliance.
8)	Spoil sites shall be located and protected as necessary to prevent spoils from eroding into any off-site state-jurisdictional waters. No spoils shall be placed in locations that may be subjected to high storm flows, where spoils might be washed back into drainages.
9)	Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, resulting from project-related activities, shall be prevented from contaminating the soil and/or entering off-site state-jurisdictional waters. These materials, if placed within or where they may enter a drainage by the project owner or any party working under contract or with the permission of the project owner, shall be removed immediately.
10)	No broken concrete, debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or washings thereof, oil or petroleum products or other organic or earthen material from any construction or associated activity of whatever nature shall be allowed to enter into, or placed where it may be washed by rainfall or runoff into, off-site state-jurisdictional waters .
11)	When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any category 3, 4, or 5 streambed or any streambed greater than 10 feet wide.
12)	No equipment maintenance shall occur within 150 feet of any category 3, 4, or 5 streambed or any streambed greater than 10 feet wide and no petroleum products or other pollutants from the equipment shall be allowed to enter these areas or enter any off-site state-jurisdictional waters under any flow.
13)	Stationary equipment such as motors, pumps, generators, and welders, located within or adjacent to a drainage, shall be positioned over drip pans. Stationary heavy equipment shall have suitable containment to handle a catastrophic spill/leak. Clean up equipment such as booms, absorbent pads, and skimmers shall be on site prior to the start of construction.
14)	The cleanup of all spills shall begin immediately. The CPM, Western, CDFG, and BLM shall be notified immediately by the project owner of any spills and shall be consulted regarding clean-up procedures.
G)	Non-Native Vegetation Removal. The project owner shall remove any non-native vegetation (Consistent with the Weed Management Plan, Condition of Certification BIO-11) from any drainage on the project site that requires the placement of a bridge, culvert, or other structure. Removal shall be done at least twice annually (Spring/Summer) throughout the life of the project.
H)	Reporting of Special-Status Species: Consistent with Condition of Certification BIO-2, if any special-status species are observed on or in proximity to the project site, or during project surveys, the project owner shall submit California Natural Diversity Data Base (CNDDB) forms and maps to the CNDDB within five working days of the sightings and provide the regional CDFG office with copies of the CNDDB forms and survey maps. The CNDDB form is available online at: www.dfg.ca.gov/whdab/pdfs/natspec.pdf . This information shall be mailed within five days to: California Department of Fish and Game, Natural Diversity Data Base, 1807 13th Street, Suite 202, Sacramento, CA 95814, (916) 324-3812. A copy of this information shall also be mailed within five days to the CPM, Western, USFWS, CDFG, and BLM.
I)	Avoidance (North of Desert Center Alternative): If the North of Desert Center Alternative is selected, project design and implementation shall avoid direct or indirect impacts to the primary wash on the site and a 100-foot buffer area surrounding the wash, including associated native vegetation.
J)	Notification: The project owner shall notify the CPM, Western, BLM, and CDFG, in writing, at least five days prior to initiation of project activities in jurisdictional areas and at least five days prior to completion of project activities in jurisdictional areas. The project owner shall notify the CPM, Western, BLM, and CDFG of any change of conditions to

TABLE A5-1 (CONTINUED)
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the project, the jurisdictional impacts, or the mitigation efforts, if the conditions at the site of the proposed project change in a manner which changes risk to biological resources that may be substantially adversely affected by the proposed project. The notifying report shall be provided to the CPM, Western, BLM, and CDFG no later than 7 days after the change of conditions is identified. As used here, change of condition refers to the process, procedures, and methods of operation of a project; the biological and physical characteristics of a project area; or the laws or regulations pertinent to the project, as described below. A copy of the notifying change of conditions report shall be included in the annual reports.

- 1) Biological Conditions: a change in biological conditions includes, but is not limited to, the following: 1) the presence of biological resources within or adjacent to the project area, whether native or non-native, not previously known to occur in the area; or 2) the presence of biological resources within or adjacent to the project area, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations.
- 2) Physical Conditions: a change in physical conditions includes, but is not limited to, the following: 1) a change in the morphology of a river, stream, or lake, such as the lowering of a bed or scouring of a bank, or changes in stream form and configuration caused by storm events; 2) the movement of a river or stream channel to a different location; 3) a reduction of or other change in vegetation on the bed, channel, or bank of a drainage, or 4) changes to the hydrologic regime such as fluctuations in the timing or volume of water flows in a river or stream.
- 3) Legal Conditions: a change in legal conditions includes, but is not limited to, a change in Regulations, Statutory Law, a Judicial or Court decision, or the listing of a species, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations.

Verification: Within 30 days of the completion of final engineering, the project owner shall notify the CPM, Western, BLM, and CDFG of the total acreage of impacts to jurisdictional waters. No fewer than 30 days prior to the start of any site or related facilities mobilization activities, the project owner shall implement the construction-related mitigation measures described above, shall verify that appropriate compensation lands have been identified, and shall submit a draft Habitat Management Plan for the identified compensation lands. No fewer than 30 days prior to the start of work potentially affecting waters of the State, the project owner shall provide written verification (i.e., through incorporation into the BRMIMP) to the CPM, Western, BLM, and CDFG that the above best management practices will be implemented and provide a discussion of planned work in waters of the State in Compliance Reports for the duration of the project.

Within 30 days after completion of the first year of project construction, the project owner shall provide to the CPM, Western, BLM, and CDFG for review and approval a report identifying that appropriate compensatory mitigation lands have been obtained, that the Habitat Management Plan has been reviewed and approved by all responsible agencies, that implementation as specified in the Plan has been initiated, verification of ongoing enhancement techniques, and a summary of all modifications made to the existing channels.

Verification of non-native vegetation removal from drainages on-site, and reporting of special-status species shall be included in monthly and annual compliance reports (Condition of Certification BIO-2). Verification of implementation and completion of the compensation land Habitat Management Plan shall be as specified in that Plan.

BIO-23: The Project Owner shall implement focused surveys to delineate any potential Couch's spadefoot breeding habitat along the lengths of the generator tie-line alignment and delineate these areas for avoidance in consultation with Western, CDFG, and BLM. These surveys shall be conducted prior to the initiation of ground disturbance for transmission line construction work and shall be conducted by a biologist knowledgeable with Couch's spadefoot biology and habitat. No disturbance shall take place within suitable breeding ponds while water is present. If suitable breeding ponds, adult spadefoots, eggs, or larvae/tadpoles are found, a 200 foot buffer shall be placed around these areas and shall remain in place until the larva/tadpoles complete metamorphosis and retreat to upland areas or until the pools are completely dry.

Impacts to all potential breeding habitat for Couch's spadefoot shall be avoided to the extent feasible. If work within this habitat cannot be avoided, work shall be conducted only while any potential breeding pools are completely dry.

Verification: No less than 30 days prior to initiating ground disturbing activities along either transmission line alignment, the project biologist shall provide a written report detailing the survey results and compliance with avoidance measures to the CPM for review in consultation with Western, CDFG, and BLM.

BIO-24: The project owner shall cover the evaporation ponds prior to any discharge with 1.5-inch mesh netting designed to exclude birds and other wildlife from drinking or landing on the water of the ponds. Netting with mesh sizes other than 1.5-inches may be installed if approved by the CPM in consultation with CDFG and USFWS. The netted ponds shall be monitored regularly to verify that the netting remains intact, is fulfilling its function in excluding birds and other wildlife from the ponds, and does not pose an entanglement threat to birds and other wildlife. The ponds shall include a visual deterrent in addition to the netting, and shall be designed such that the netting shall never contact the water.

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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The project owner shall also design and implement an Evaporation Pond Design, Monitoring, and Management Plan (Evaporation Pond Plan) that meets the approval of the CPM, USFWS, CDFG, and Western. The goal of the Evaporation Pond Plan shall be to avoid the potential for bird and wildlife mortality associated with the evaporation ponds. The Evaporation Pond Plan shall include:

- A) A discussion of the objectives of the Evaporation Pond Plan;
- B) A description of project design features such as side slope specifications, freeboard and depth requirements, covering, and fencing;
- C) A discussion on the placement of the evaporation ponds as to reduce the potential of collision or electrocution of wildlife near the transmission line;
- D) Monitoring of the ponds, which shall include:
 - 1) Monthly Monitoring. The Designated Biologist or Biological Monitor shall regularly survey the ponds at least once per month starting with the first month of operation of the evaporation ponds. The purpose of the surveys shall be to determine if the netted ponds are effective in excluding birds, if the nets pose an entrapment hazard to birds and wildlife, and to assess the structural integrity of the nets. Surveys shall be of sufficient duration and intensity to provide an accurate assessment of bird and wildlife use of the ponds during all seasons. Surveyors shall be experienced with bird identification and survey techniques. Operations staff at the project site shall also report finding any dead birds or other wildlife at the evaporation ponds to the Designated Biologist within one day of the detection of the carcass. The Designated Biologists shall report any bird or other wildlife deaths or entanglements within two days of the discovery to the CPM, Western, CDFG, and USFWS.
 - 2) Dead or Entangled Birds. If dead or entangled birds are detected, the Designated Biologist shall take immediate action to correct the source of mortality or entanglement. The Designated Biologist shall make immediate efforts to contact and consult the CPM, Western, CDFG, and USFWS by phone and electronic communications prior to taking remedial action upon detection of the problem, but the inability to reach these parties shall not delay taking action that would, in the judgment of the Designated Biologist, prevent further mortality of birds or other wildlife at the evaporation ponds.
 - 3) Quarterly Monitoring. If after 12 consecutive monthly site visits no bird or wildlife deaths or entanglements are detected by or reported to the Designated Biologist, monitoring can be reduced to quarterly visits.
 - 4) Biannual Monitoring. If after 12 consecutive quarterly site visits no bird or wildlife deaths or entanglements are detected by or reported to the Designated Biologist, and with approval from the CPM, USFWS and CDFG, future surveys may be reduced to two surveys per year, during spring and fall migration.
 - a) Management actions such as bird deterrence/hazing and water level management and triggers for those management actions; and
 - b) Reporting requirements.

Verification: No less than 30 days prior to operation of the evaporation ponds the project owner shall provide to the CPM as-built drawings and photographs of the ponds indicating that the bird exclusion netting has been installed. At least 30 days prior to start of any project-related ground disturbance activities, the project owner shall provide the CPM, Western, USFWS, and CDFG with the final version of the Evaporation Pond Plan that has been reviewed and approved by USFWS, CDFG, and staff. The CPM shall determine the plan's acceptability within 15 days of receipt of the final plan. All modifications to the approved Evaporation Pond Plan must be made only after consultation with the CPM, Western, USFWS, and CDFG. The project owner shall notify the CPM no less than 5 working days before implementing any CPM-approved modifications to the Evaporation Pond Plan.

Within 30 days after completion of project construction, the project owner shall provide to the CPM for review and approval a report identifying which items of the Evaporation Pond Plan have been completed, a summary of all modifications to mitigation measures made during the project's construction phase, and as-built drawings of the evaporation ponds.

For the first year of operation the Designated Biologist shall submit quarterly reports to the CPM, Western, CDFG, and USFWS describing the dates, durations and results of site visits conducted at the evaporation ponds. Thereafter the Designated Biologist shall submit annual monitoring reports with this information. The quarterly and annual reports shall fully describe any bird or wildlife mortality or entanglements detected during the site visits or at any other time, and shall describe actions taken to remedy these problems. The annual report shall be submitted to the CPM, Western, CDFG, and USFWS no later than January 31st of every year for the life of the project.

BIO-25 Avian and Bat Protection Plan: The project owner shall prepare and implement an Avian and Bat Protection Plan adopting all applicable guidelines recommended by the

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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USFWS (2010e) in coordination with the Heliostat Positioning Plan (Condition of Certification TRANS-5) to minimize death and injury of birds or bats from (1) collisions with facility features including the heliostat structures, central tower, and generator tie-line towers or transmission lines and (2) focused light and heat at and near the central tower or at “standby points” while the heliostats are focused away from the tower. The Avian and Bat Protection Plan shall include modifications to proposed plant operation to avoid or minimize focusing heliostats at standby points and, instead, move heliostats into a stowed position or another alternative configuration when the power plant is in standby mode. The Avian and Bat Protection Plan shall identify additional adaptive management measures to minimize collisions and incinerations. The Avian and Bat Protection Plan shall also provide documentation that the project is in compliance with the Bald and Golden Eagle Protection Act (Title 16, United States Code, Section 668) and shall provide specific construction activity and scheduling guidelines to avoid disturbance to golden eagle nesting territories (see Condition of Certification BIO-18). The Avian and Bat Protection Plan shall provide a reporting schedule for all actions taken during project construction or operation. Upon USFWS approval, it shall be reviewed and approved by the CPM in consultation with Western, CDFG, and BLM. Upon review and approval, it shall be incorporated into the project’s BRMIMP and implemented.

Bird and Bat Monitoring Study: The project owner shall prepare and implement a Bird and Bat Monitoring Study to monitor the death and injury of birds and bats from collisions with project facilities including heliostats and solar receiver tower, and burning caused by flying through focused sunlight around the solar receiver tower or standby points. The study design shall be approved by the CPM in consultation with Western, CDFG and USFWS, and shall be incorporated into the project’s BRMIMP and implemented by the Designated Biologist in coordination with the project owner, CPM, Western, CDFG, BLM, and USFWS. The Bird and Bat Monitoring Study shall include detailed specifications on data and carcass collection protocol, to include identification of each carcass to species wherever possible and a proposed schedule of carcass searches to be based upon a valid sampling rationale. All bird or bat carcasses shall be retained in a freezer on-site, with all collection data written on an attached data form, pending disposition to CDFG or a certified museum (e.g., San Bernardino County Museum; Western Foundation of Vertebrate Zoology or California Academy of Sciences) pending recommendation of the wildlife agencies. For any special-status species carcasses, the Biological Monitor shall contact CDFG and USFWS (for golden eagle or any federally-listed species) within one working day of receipt of the carcass for guidance on disposal or storage of the carcass. The Biological Monitor shall report the special-status species record as described in Conditions of Certification BIO-2, BIO-7, and BIO-22.

The study shall also include seasonal trials to assess bias from carcass removal by scavengers as well as searcher bias.

Adaptive management and mitigation strategies that may be implemented in the event that the Bird and Bat Monitoring Study identifies the need for additional mitigation could include the use of visual or auditory deterrents, or the acquisition and conservation of offsite habitat of similar type and quality as was present at the RSEP site prior to project development.

Verification: No more than 60 days following the docketing of the Energy Commission Final Decision or publication of Western’s Record of Decision, whichever comes first, the project owner shall submit for approval by the CPM, in consultation with Western, BLM, and CDFG a final Avian and Bat Protection Plan which has already been reviewed and approved by USFWS. The Plan shall include documentation that the project is in compliance with the Bald and Golden Eagle Protection Act (Title 16, United States Code Section 668). This documentation shall include a written or electronic transmittal from the USFWS indicating its approval of the Avian and Bat Protection Plan, the status of any permit that may be required, and any follow-up actions required by the applicant. Modifications to the Avian and Bat Protection Plan shall be made only after approval from the CPM, in consultation with Western, BLM, USFWS, and CDFG.

Implementation and results of the Avian and Bat Protection Plan shall be described in periodic reports, scheduled according to the reporting schedule set forth in the approved Plan. The project owner shall submit reports to the CPM for review and approval, in consultation with Western, CDFG, BLM, and USFWS.

No more than 30 days following the publication of the Energy Commission Decision, the project owner shall submit to the CPM, Western, USFWS, and CDFG a draft Bird and Bat Monitoring Study. At least 60 days prior to start of any project-related ground disturbance activities, the project owner shall provide the CPM with the final version of the Bird and Bat Monitoring Study, as reviewed and approved by the CPM in consultation with Western, CDFG and USFWS. Modifications to the Bird and Bat Monitoring Study shall be made only with the approval of the CPM in consultation with Western, CDFG and USFWS.

For at least two years following the beginning of operation the project owner shall submit quarterly reports to the CPM, Western, CDFG, and USFWS describing the dates, durations, and results of monitoring. The quarterly reports shall provide detailed descriptions of any project-related bird or wildlife deaths or injuries detected during the monitoring study or at any other time.

Following the completion of the fourth quarter of monitoring each year, the Designated Biologist shall prepare an Annual Report that summarizes the year’s data, analyzes any project-related bird and/or bat fatalities or injuries detected, and provides recommendations for future monitoring and any adaptive management actions needed. The Annual Report shall be

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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provided to the CPM, Western, CDFG, and USFWS.

Quarterly reporting shall continue until the CPM, in consultation with Western, CDFG and USFWS determine whether further monitoring is needed, and whether mitigation (e.g., development and/or implementation of bird deterrent technology, etc.) and/or adaptive management measures are necessary. After the Bird and Bat Monitoring Study is determined by the CPM to be complete, the project owner or contractor shall prepare a paper that describes the study design and monitoring results to be submitted to a peer-reviewed scientific journal. A copy of the manuscript and proof of submittal shall be provided to the CPM within one year of concluding the monitoring study.

BIO-26: The Project owner may choose to satisfy its mitigation obligations identified in this Decision by paying an in lieu fee instead of acquiring compensation lands, pursuant to Fish and Game code sections 2069 and 2099 or any other applicable in-lieu fee provision, provided that the project's in-lieu fee provision is found by the Commission to be in compliance with CEQA and CESA requirements. If the in-lieu fee proposal is found by the Commission to be in compliance, and the Project Owner chooses to satisfy its mitigation obligations through the in-lieu fee, the Project Owner shall provide proof of the in-lieu fee payment to the CPM.

Verification: If electing to use this provision, the Project Owner shall notify the Commission and all parties to the proceeding that it would like a determination that the Project's in-lieu fee proposal meets CEQA and CESA requirements. If the project owner elects to use this provision prior to posting security required by the conditions of certification, the Project Owner shall provide proof of the in-lieu fee payment to the CPM prior to any ground disturbance. If the Project owner elects to use this provision after posting such security, the Project owner shall provide proof of the in lieu fee payment prior to the time required for habitat compensation lands to be surrendered in accordance with the Condition of Certification.

SOIL AND WATER

SOIL&WATER-1: Prior to site mobilization, the project owner shall obtain the CPM's approval for a site specific DESCP that ensures protection of water quality and soil resources of the project site and all linear facilities for both the construction and operation phases of the project. This plan shall address appropriate methods and actions, both temporary and permanent, for the protection of water quality and soil resources, demonstrate no increase in off-site flooding potential, and identify all monitoring and maintenance activities. The project owner shall complete all engineering plans, reports, and documents necessary for the CPM to conduct a review of the proposed project and provide a written evaluation as to whether the proposed grading, drainage improvements, and flood management activities comply with all requirements presented herein. The plan shall be consistent with the grading and drainage plan as required by Condition of Certification CIVIL-1 and shall contain the following elements:

Vicinity Map: A map shall be provided indicating the location of all project elements with depictions of all major geographic features to include watercourses, washes, irrigation and drainage canals, major utilities, and sensitive areas.

Site Delineation: The site and all project elements shall be delineated showing boundary lines of all construction areas and the location of all existing and proposed structures, underground utilities, roads, and drainage facilities. Adjacent property owners shall be identified on the plan maps. All maps shall be presented at a legible scale

Drainage: The DESCP shall include the following elements:

- A) Topography. Topography for off-site areas to define the existing upstream tributary areas to the site and downstream to provide enough definition to map the existing storm water flow and flood hazard. Spot elevations shall be required where relatively flat conditions exist.
- B) Proposed Grade. Proposed grade contours shall be shown at a scale appropriate for delineation of on-site ephemeral washes, drainage ditches, and tie-ins to the existing topography.
- C) Hydrology. Existing and proposed hydrologic calculations for on-site areas and off-site areas that drain to the site; include maps showing the drainage area boundaries and sizes in acres, topography and typical overland flow directions, and show all existing, interim, and proposed drainage infrastructure and their intended direction of flow.
- D) Hydraulics. Provide hydraulic calculations to support the selection and sizing of the on-site drainage network, diversion facilities and BMPs.

Watercourses and Critical Areas: The DESCP shall show the location of all on-site and nearby watercourses including washes, irrigation and drainage canals, and drainage ditches, and shall indicate the proximity of those features to the construction site. Maps shall identify high hazard flood prone areas.

Clearing and Grading: The plan shall provide a delineation of all areas to be cleared of vegetation and areas to be preserved. The plan shall provide elevations, slopes, locations, and

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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extent of all proposed grading as shown by contours, cross-sections, cut/fill depths or other means. The locations of any disposal areas, fills, or other special features shall also be shown. Existing and proposed topography tying in proposed contours with existing topography shall be illustrated. The DESCP shall include a statement of the quantities of material excavated at the site, whether such excavations or fill is temporary or permanent, and the amount of such material to be imported or exported or a

Soil and Water statement explaining that there would be no clearing and/or grading conducted for each element of the project. Areas of no disturbance shall be properly identified and delineated on the plan maps.

Soil Wind and Water Erosion Control: The plan shall address exposed soil treatments to be used during construction and operation of the proposed project for both road and non-road surfaces including specifically identifying all chemical based dust palliatives, soil bonding, and weighting agents appropriate for use at the proposed project site that would not cause adverse effects to vegetation; BMPs shall include measures designed to prevent wind and water erosion including application of chemical dust palliatives after rough grading to limit water use. All dust palliatives, soil binders, and weighting agents shall be approved by the CPM prior to use.

Project Schedule: The DESCP shall identify on the topographic site map the location of the site-specific BMPs to be employed during each phase of construction (initial grading, project element construction, and final grading/stabilization). BMP implementation schedules shall be provided for each project element for each phase of construction.

Best Management Practices: The DESCP shall show the location, timing, and maintenance schedule of all erosion-and sediment-control BMPs to be used prior to initial grading, during project element excavation and construction, during final grading/stabilization, and after construction. BMPs shall include measures designed to control dust and stabilize construction access roads and entrances. The maintenance schedule shall include post-construction maintenance of treatment-control BMPs applied to disturbed areas following construction.

Erosion Control Drawings: The erosion-control drawings and narrative shall be designed, stamped and sealed by a professional engineer or erosion-control specialist.

Agency Comments: The DESCP shall include copies of recommendations from the County of Riverside and RWQCB, if applicable.

Monitoring Plan: Monitoring activities shall include routine measurement of the volume of accumulated sediment and scour in storm water diversions channels. The monitoring plan shall be part of the channel maintenance plan in Condition of Certification.

Verification: The DESCP shall be consistent with the grading and drainage plan as required by Condition of Certification CIVIL-1, and relevant portions of the DESCP shall be submitted to the chief building official (CBO) for review and approval. In addition, the project owner shall do all of the following:

- A) No later than ninety (90) days prior to start of site mobilization, the project owner shall submit a copy of the DESCP to Riverside County and the RWQCB for review and comment. The CPM shall consider comments received from Riverside County and RWQCB and approve the DESCP.
- B) During construction, the project owner shall provide an analysis in the monthly compliance report on the effectiveness of the drainage, erosion, and sediment control measures and the results of monitoring and maintenance activities.
- C) Once operational, the project owner shall provide in the annual compliance report information on the results of storm water BMP monitoring and maintenance activities.
- D) Provide the CPM with two (2) copies each of all monitoring or compliance reports.

SOIL&WATER-2: The Project Owner shall comply with the requirements specified in Appendices B and C, and any updates to these Waste Discharge Requirements that may be required as the project design is refined. These requirements relate to discharges, or potential discharges, of waste that could affect the quality of waters of the state, and were developed in consultation with staff of the State Water Resources Control Board and/or the applicable California Regional Water Quality Control Board (hereafter "Water Boards"), for the discharge to evaporation ponds. It is the Commission's intent that these requirements be enforceable by both the Commission and the Water Boards. In furtherance of that objective, the Commission hereby delegates the enforcement of these requirements, and associated monitoring, inspection and annual fee collection authority, to the Water Boards. Accordingly, the Commission and the Water Board shall confer with each other and coordinate, as needed, in the enforcement of the requirements. The Project Owner shall pay the annual waste discharge permit fee associated with this facility to the Water Boards. In addition, the Water Boards may "prescribe" these requirements as waste discharge requirements pursuant to Water Code Section 13263 solely for the purposes of enforcement, monitoring, inspection, and the assessment of annual fees, consistent with Public Resources Code Section 25531, subdivision (c).

Verification: No later than sixty (60) days prior to any wastewater discharge, the RSEP project shall provide documentation to the CPM, with copies to the Colorado River Basin

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ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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RWQCB, demonstrating compliance with the WDRs established in Appendices B and C, including any updates that may be required as the project design is refined. Any changes to the design, construction, or operation of the ponds shall be requested in writing to the CPM, with copies to the Colorado River Basin RWQCB, and approved by the CPM, in consultation with the Colorado River Basin RWQCB, prior to initiation of any changes. The RSEP project shall provide to the CPM, with copies to the Colorado River Basin RWQCB, all monitoring reports required by the WDRs, and fully explain any violations, exceedances, enforcement actions, or corrective actions related to construction or operation of the ponds, treatment units, or storm water system.

SOIL&WATER-3: The project owner shall develop and implement a Channel Maintenance Program (Program) that provides long-term guidance to implement routine channel maintenance projects and to comply with SOIL&WATER-1 in a feasible and environmentally-sensitive manner. The Program will be a process and policy document prepared by the project owner, reviewed by the CPM. The Channel Maintenance Program shall include the following:

- A) Purpose and Objectives – establishes the main goals of the program, of indefinite length, to maintain channels to meet their original design capacity for flood protection and conveyance, and maintain groundwater recharge.
- B) Application and Use - The channel maintenance work area is defined as the RSEP engineered channels, typically extending to the top of bank, include access roads, and any adjacent property that the RSEP owns or holds an easement for access and maintenance. The program would include all channel maintenance as needed to protect the RSEP facilities and downstream property.
- C) Channel Maintenance Activities
 - 1) Sediment Removal - sediment is removed if it: (1) reduces the effective flood capacity, to less than the design discharge, (2) prevents appurtenant hydraulic structures from functioning as intended, and (3) becomes a permanent, non-erodible barrier to instream flows.
 - 2) Vegetation Management - manage vegetation in and adjacent to the channels to maintain hydraulic capacity. Vegetation management shall include control of invasive or nonnative vegetation.
 - 3) Bank Protection and Grade Control Repairs – Bank protection and grade control structure repairs involve any action by the project owner to repair eroding banks, incising toes, scoured channel beds, as well as preventative erosion protection. The project owner would implement instream repairs when the problem:
 - a) causes or could cause significant damage to the RSEP project; adjacent property, or the structural elements of the channels;
 - b) is a public safety concern;
 - c) negatively affects groundwater recharge; or
 - d) negatively affects the mitigation vegetation, habitat, or species of concern.
- D) Routine Channel Maintenance - trash removal and associated debris to maintain channel design capacity; repair and installation of fences, gates and signs; grading and other repairs to restore the original contour of access roads and levees (if applicable).
- E) Related Programmatic Documentation – the CPM will review and approve the Program documentation.
- F) Channel Maintenance Process Overview

Program Development and Documentation – This documentation provides the permitting requirements for channel maintenance work in accordance with the conditions of certification for individual routine maintenance of the engineered channel without having to perform separate CEQA review or obtain permits.

Maintenance Guidelines - based on two concepts: (1) the maintenance standard and (2) the acceptable maintenance condition, and applies to sediment removal, vegetation management, trash and debris collection, blockage removal, fence repairs, and access road maintenance.

Implementation – Sets Maintenance Guidelines for vegetation and sediment management. Maintenance Guidelines for sediment removal provide information on the allowable depth of

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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sediment for the engineered channel that would continue to provide design discharge protection.

A) Reporting – the CPM requires the following reports to be submitted each year as part of the Annual Compliance Report:

- 1) Channel Maintenance Work Plan - Describes the planned “major” maintenance activities and extent of work to be accomplished; and
- 2) Channel Maintenance Program Annual Report – Specifies which maintenance activities were completed during the year including type of work, location, and measure of the activity (e.g. cubic yards of sediment removed).

Verification: At least 60 days prior to the start of any project-related site disturbance activities, the project owner shall coordinate with the CPM to develop the Channel Maintenance Program. The project owner shall submit two copies of the programmatic documentation, describing the proposed Channel Maintenance Program, to the CPM (for review and approval). The project owner shall provide written notification that they plan to adopt and implement the measures identified in the approved Channel Maintenance Program. The project owner shall:

- A) Supervise the implementation of a Channel Maintenance Program in accordance with conditions of certification;
 - B) Ensure that the RSEP Construction and Operations Manager receive training on the Channel Maintenance Program;
 - C) As part of the RSEP Annual Compliance Report to the CPM, submit a Channel Maintenance Program Annual Report specifying which maintenance activities were completed during the year including type of work, location, and measure of the activity (e.g. cubic yards of sediment removed).
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SOIL&WATER-4: Pre-Well Installation. The project owner shall construct and operate up to two on-site groundwater wells that produce water from the Rice Valley Groundwater Basin. The project owner shall ensure that the wells are completed in accordance with all applicable state and local water well construction requirements. Prior to the start of well construction activities, the project owner shall submit for review and comment a well construction packet in accordance with Riverside County Ordinance 682, containing the documentation, plans, and fees normally required for the county’s well permit, with copies to the CPM. The project shall not construct a well or extract and use groundwater until the CPM provides approval to construct and operate the well.

Post-Well Installation. The project owner shall provide documentation to the CPM that the well has been properly completed. In accordance with California’s Water Code section 13754, the driller of the well shall submit to the DWR a Well Completion Report for each well installed.

Groundwater Well Abandonment. On property controlled by the project owner, the project owner shall protect groundwater resources by abandoning all groundwater wells that are constructed in such a manner that the screen interval of the well intercepts poor quality and better quality aquifer water. Alternatively, wells that are otherwise in good condition may be modified, if feasible, such that the screen interval does not cross connect zones of varying water quality. Groundwater wells shall be abandoned or modified in accordance with all applicable state and local water well abandonment or construction requirements, including the California Department of Water Resources Bulletins 74-81 & 74-90. Prior to the start of well construction activities, the project owner shall submit for review and comment, a well abandonment or modification packet to Riverside County in accordance with Ordinance 682 containing the documentation, plans, and fees normally required for the county’s well abandonment permit, with copies to the CPM. The project shall not abandon or modify a well until the CPM provides approval.

Verification: The project owner shall ensure the Well Completion Reports are submitted and shall ensure compliance with all State and county water well standards and requirements for the life of the wells. The project owner shall do all of the following:

- A) No later than 60 days prior to the use of groundwater for site construction, the project owner shall submit a Groundwater Monitoring and Management Plan to Riverside County for review and comment (see Condition of Certification SOIL&WATER-6).
 - B) No later than sixty (60) days prior to the abandonment and construction of the on-site groundwater wells, the project owner shall submit to the CPM a copy of the water well abandonment and construction packet submitted to the County of Riverside for review and comment.
 - C) No later than thirty (30) days prior to the construction of the on-site water supply wells, the project owner shall submit a copy of any written comments received from the Riverside County indicating whether the proposed well abandonment and construction activities comply with all county well requirements and meet the requirements
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

established by the county's water well permit program.

- D) No later than sixty (60) days after installation of each well at the project site, the project owner shall provide to the CPM copies of the Well Completion Reports submitted to the DWR by the well driller. The project owner shall submit to the CPM, together with the Well Completion Report, a copy of well drilling logs, water quality analyses, and any inspection reports.
 - E) During well construction and for the operational life of the well, the project owner shall submit two (2) copies to the CPM for review and approval any proposed well construction or operation changes. .
 - F) No later than fifteen (15) days after completion of the on-site water supply wells, including removal of drilling mud, the project owner shall submit documentation to the CPM confirming that well drilling activities were conducted in compliance with Title 23, California Code of Regulations, Chapter 15, Discharges of Hazardous Wastes to Land, (23 CCR, sections 2510 et seq.) requirements and that any on-site drilling sumps used for project drilling activities were removed in compliance with 23 CCR section 2511(c).
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SOIL&WATER-5: The proposed project's use of groundwater for all construction activities shall not exceed an average rate of 420 acre-feet per year of construction. The proposed project's use of groundwater for all operations activities shall not exceed 150 acre-feet per year. Water quality used for project construction and operation will be reported in accordance with Condition of Certification SOIL&WATER-6 to ensure compliance with this condition. Prior to the use of groundwater for construction, the project owner shall install and maintain metering devices as part of the water supply and distribution system to document project water use and to monitor and record in gallons per month the total volume(s) of water supplied to the project from this water source. The metering devices shall be operational for the life of the project.

Verification: Beginning six (6) months after the start of construction, the project owner shall prepare a semi-annual summary report of the amount of water used for construction purposes. The summary shall include the monthly water usage in gallons.

At least sixty (60) days prior to the start of construction of the proposed project, the project owner shall submit to the CPM a copy of evidence that metering devices have been installed and are operational.

The project owner shall prepare an annual summary report, which will include daily usage, monthly range and monthly average of daily water usage in gallons per day, and total water used on a monthly and annual basis in acre-feet. For years subsequent to the initial year of operation, the annual summary report will also include the yearly range and yearly average water use by source. For calculating the total water use, the term "year" will correspond to the date established for the annual compliance report submittal.

SOIL&WATER-6: The project owner shall submit a Groundwater Level and Quality Monitoring and Reporting Plan to the CPM for review and approval. The Groundwater Level and Quality Monitoring and Reporting Plan shall provide a description of the methodology for monitoring background and site groundwater levels and quality. Prior to project construction, monitoring shall commence to establish pre-construction base-line groundwater level conditions in the upper and lower aquifer and shall include pre-construction, construction, and project operation water use. The primary objectives for the monitoring is to ensure the project's water use is consistent with predicted drawdown in the lower aquifer, establish pre-construction and project related groundwater quality and groundwater elevation levels that can be quantitatively compared against observed and simulated levels near the project pumping well, and to avoid, minimize, or mitigate impacts to the Rice Valley groundwater basin storage.

Verification: The project owner shall complete the following:

- A) At least six (6) weeks prior to construction, a Groundwater Level and Quality Monitoring and Reporting Plan shall be submitted to the CPM for review and approval before completion of Condition of Certification SOIL& WATER-4. The Plan shall include a scaled map showing the site and vicinity, existing well locations, and proposed monitoring locations (both existing wells and new monitoring wells proposed for construction). The map shall also include relevant natural and anthropogenic features (existing and proposed as part of this project). The plan also shall provide: (1) well construction information and borehole lithology for each existing well proposed for use as a monitoring well; (2) description of proposed drilling and well installation methods; (3) proposed monitoring well design; and, (4) schedule for completion of the work.
 - B) At least four (4) weeks prior to construction, a Well Monitoring Installation and Groundwater Level Network Report shall be submitted to the CPM for review and approval. The report shall include a scaled map showing the final monitoring well network. If applicable, it shall document the drilling methods employed, provide individual well construction as-builds, borehole lithology recorded from the drill cuttings, well development, and well survey results. The well survey shall measure the location and elevation of the top of the well casing and reference point for all water level measurements, and shall include the coordinate system and datum for the survey measurements.
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure
<p>Additionally, the report shall describe the water level monitoring equipment employed in the wells and document their deployment and use.</p>
<p>C) As part of the monitoring well network development, all newly constructed monitoring wells shall be constructed consistent with State and Riverside County specifications.</p>
<p>D) At least four (4) weeks prior to beginning groundwater pumping for project construction, baseline groundwater quality and groundwater level monitoring data shall be reported to the CPM. The report shall include the following:</p>
<p>1) An assessment of pre-project groundwater levels in the upper and lower aquifer, a summary of available climatic information (monthly average temperature and rainfall records from the nearest weather station), and a comparison and assessment of water level data relative to the assumptions and spatial trends simulated by the applicant's groundwater model.</p>
<p>2) An assessment of pre-project groundwater quality with groundwater samples analyzed for TDS, chloride, nitrates, major cations and anions, and oxygen-18 and deuterium isotopes. These analyses, and particularly the stable isotope data, can be useful for identifying partially evaporated water sources and assessing their contributions to the quality of water produced by wells.</p>
<p>3) The data shall be tabulated, summarized, and submitted to the CPM. The data summary shall include the estimated range (minimum and maximum values), average, and median for each constituent analyzed. The data shall also be analyzed using the Mann-Kendall test for trend to assess whether pre-project water quality trends, if any, are statistically significant.</p>
<p>E) During project construction and during project operations, the project owner shall semi-annually monitor the quality of groundwater and changes in groundwater elevations and submit data semi-annually to the CPM. The summary report shall document water level monitoring methods, the water level data, water level plots, and a comparison between pre- and post-project start-up water level trends as itemized below. The report shall also include a summary of actual water use conditions, monthly climatic information (temperature and rainfall), and a comparison and assessment of water level data relative to the assumptions and simulated spatial trends predicted by the applicant's groundwater model.</p>
<p>1) Groundwater samples from all wells in the monitoring well network, which shall include production wells, shall be analyzed and reported semi-annually for TDS, chloride, nitrates, cations and anions, and oxygen-18 and deuterium isotopes. These analyses, and particularly the stable isotope data, can be useful for identifying partially evaporated water sources and assessing their contributions to the quality of water produced by wells.</p>
<p>a) Water quality and level trends shall be analyzed using the Mann-Kendall test for trend. Trends in the compliance data shall be compared and contrasted to pre-project trends, if any.</p>
<p>b) If no significant trends exist in the compliance data, or the data set is insufficient to assess trends, all water-supply well compliance data shall be pooled and contrast to the pre-project data set. If significant pre-project trends are identified, the compliance data can first be corrected to remove pre-project trends and then contrast to the pre-project data.</p>
<p>c) The contrast between pre-project and compliance mean or median concentrations shall be compared using an Analysis of Variance (ANOVA). A parametric ANOVA (for example, an F-test) can be conducted on the two data sets if the residuals between observed and expected values are normally distributed and have equal variance, or the data can be transformed to an approximately normal distribution. If the data cannot be represented by a normal distribution, then a nonparametric ANOVA shall be conducted (for example, the Kruskal-Wallis test). If a statistically significant difference is identified between the two data sets, the monitoring data are inconsistent with random differences between the pre-project and baseline data indicating a significant water quality impact from project pumping may be occurring.</p>
<p>d) If compliance data indicate the quality of the production water has changed by a statistically significant amount for three consecutive years and the constituent concentrations exceed Water Quality Objectives, the applicant shall supply the CPM and RWQCB with a report describing the exceedances.</p>
<p>SOIL&WATER-7: The Project is subject to the requirement of Water Code Sections 4999 et. seq. for reporting of groundwater production in excess of 25 acre feet per year.</p>
<p>Verification: The project owner shall file an annual "Notice of Extraction and Diversion of Water" with the SWRCB in accordance with Water Code Sections 4999 et. seq. The Project</p>

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

Owner shall include a copy of the filing in the annual compliance report.

SOIL&WATER-8: The project owner shall comply with the requirements of the County of Riverside Ordinance Code Title 8, Chapter 8.124 and the California Plumbing Code (24 Cal. Code Regs., Part 5) regarding sanitary waste disposal facilities such as septic systems and leach fields. The septic system and leach fields shall be designed, operated, and maintained in a manner that ensures no deleterious impact to groundwater or surface water. Compliance shall include an engineering report on the septic system and leach field design, operation, maintenance, and loading impact to groundwater. If a temporary septic system and leach field will be used for management of worker housing domestic and sanitary wastes or construction trailer areas, the project owner shall ensure that the system is designed, operated, and destroyed prior to facility operation, in accordance with County of Riverside requirements. Use of the permanent facility septic systems and leach fields for onsite disposal of domestic wastes generated from temporary worker housing or construction trailer areas is prohibited without prior approval from the CPM.

Verification: The project owner shall submit all necessary information and the appropriate fee to the County of Riverside to ensure that the project has complied with county sanitary waste disposal facilities requirements. Written assessments prepared by the County of Riverside regarding the project's compliance with these requirements must be submitted to the CPM for review and approval at least thirty (30) days prior to use of the septic systems. Any requests to use the permanent facility septic systems for onsite disposal of domestic wastes generated from temporary worker housing or construction trailer areas must be made at least ninety (90) days in advance of the proposed use and shall be accompanied by a complete technical assessment demonstrating that the proposed use is consistent with the County of Riverside sanitary waste disposal facility requirements and would not cause the system to fail or exceed regulatory standards.

SOIL&WATER-9: The Project is subject to the requirement of Title 22, Article 3, Sections 64400.80 through 64445 for a non-transient, non-community water system (serving 25 people or more for more than six months). In addition, the system will require periodic monitoring for various bacteriological, inorganic and organic constituents.

Verification: The project owner shall obtain a permit to operate a non-transient, non-community water system with the County of Riverside at least sixty (60) days prior to use of a domestic water supply at the site. In addition, the project owner shall submit to the CPM a monitoring and reporting plan for production wells operated as part of the domestic water supply system prior to plant operations. The plan will include reporting requirements including monthly, quarterly, and annual submissions.

The project owner shall designate a California Certified Water Treatment Plant Operator as well as the technical, managerial, and financial requirements as prescribed by State law. The project owner will supply updates on an annual basis regarding monitoring requirements, any submittals to the County of Riverside, and proof of annual renewal of the operating permit.

SOIL&WATER-10: The project owner will prepare a decommissioning plan for the transmission line and substation that will meet the requirements of the BLM. The project owner shall identify likely decommissioning scenarios and develop specific decommissioning plans for each scenario that will identify actions to be taken to avoid or mitigate long-term impacts related to water and wind erosion after decommissioning. Actions may include such measures as a decommissioning SWPPP, revegetation and restoration of disturbed areas, post-decommissioning maintenance, collection and disposal of project materials and chemicals, and access restrictions.

Verification: At least sixty (60) days prior to the start of site mobilization or alternate date as agreed to with BLM, the project owner shall submit decommissioning plans to BLM for comment and the CPM for review and approval. The project owner shall amend these documents as necessary, with approval from the CPM, should the decommissioning scenario change in the future.

CULTURAL

CUL-1: DESERT TRAINING CENTER CALIFORNIA-ARIZONA MANEUVER AREA CULTURAL LANDSCAPE (DTCCL) PROGRAM

The project owner shall contribute to a special fund set up by the Energy Commission and/or Western to finance the DTC/C-AMA Cultural Landscape Documentation and Possible NRHP Nomination Program (DTCCL Program) presented in the RSEP SA/DEIS.

The amount of the contribution shall be \$22 per acre that the project encloses or otherwise disturbs. Any additional contingency contribution is not to exceed an amount totaling 20 percent of the original contribution. The contribution to the special fund may be made in installments, with the approval of the Compliance Project Manager (CPM), with the first installment to constitute 1/3 of the total original contribution amount.

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

If a project is not certified, a project owner does not build the project, or for any reason deemed acceptable by the CPM, a project owner does not participate in funding the DTCCL Program, the other project owner(s) may consult with the CPM to adjust the scale of the DTCCL Program research activities to match available funding. A project owner that funds the DTCCL Program and then withdraws shall be able to receive a refund of their contributions on a prorated basis.

Verification: Within two weeks (14 days) of the receipt of an invoice from the Energy Commission or BLM, the project owner shall contribute the entire amount of the required contribution or the first of three installments, equal to one-third of the total contribution amount, to the established funding vehicle for the Program. The delivery dates for the remaining installments shall be determined by the CPM, based on program requirements.

The project owner shall provide a copy of the notice of successful transfer of funds for any payment or installment to the DTCCL fund to the CPM within 10 days of receipt.

CUL-2: CULTURAL RESOURCES PERSONNEL

Prior to the start of ground disturbance (includes preconstruction site mobilization and construction grading, boring, and trenching, as defined in the General Conditions for this project), the project owner shall obtain the services of a Cultural Resources Specialist (CRS) and one or more alternate CRSs, if alternates are needed. The CRS shall manage all monitoring, mitigation, curation, and reporting activities in accordance with the Conditions of Certification (Conditions).

The CRS may obtain the services of Cultural Resources Monitors (CRMs), as needed, to assist in monitoring, mitigation, and curation activities. The project owner shall ensure that the CRS implements the cultural resources conditions providing for data recovery from known historical resources and makes recommendations regarding the eligibility for listing in the California Register of Historical Resources (CRHR) of any cultural resources that are newly discovered or that may be affected in an unanticipated manner. No ground disturbance shall occur prior to Compliance Project Manager (CPM) approval of the CRS and alternates, unless such activities are specifically approved by the CPM. Approval of a CRS may be denied or revoked for reasons including, but not limited to, non-compliance on this or other Energy Commission projects.

Cultural Resources Specialist

The resumes for the CRS and alternate(s) shall include information demonstrating, to the satisfaction of the CPM, that their training and backgrounds conform to the U.S. Secretary of Interior's Professional Qualifications Standards, as published in Title 36, Code of Federal Regulations, part 61. In addition, the CRS shall have the following qualifications:

- A) A background in anthropology and prehistoric archaeology; 2. At least 10 years of archaeological resource mitigation and field experience, with at least 3 of those years in California; and 3. At least 3 years of experience in a decision-making capacity on cultural resources projects, with at least 1 of those years in California, and the appropriate training and experience to knowledgeably make recommendations regarding the significance of cultural resources.

The project owner shall ensure that the CRS obtains the services of a qualified historical archaeologist to conduct the research specified in CUL-

- B) The Project Historical Archaeologist's (PHA) training and background must meet the U.S. Secretary of Interior's Professional Qualifications Standards for historical archaeology, as published in Title 36, Code of Federal Regulations, part 61.

The resumes of the CRS, alternate CRS, and PHA shall include the names and telephone numbers of contacts familiar with the work of these persons on projects referenced in the resumes and demonstrate to the satisfaction of the CPM that these persons have the appropriate training and experience to undertake the required research. The project owner may name and hire the CRS, alternate CRS, and PHA prior to certification.

Field Crew Members and Cultural Resources Monitors

CRMs and field crew members, including the Special Interest Monitor (SIM)², shall have the following qualifications:

- A) A B.S. or B.A. degree in anthropology, archaeology, historical archaeology, or a related field, and one year experience monitoring in California; or
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² The SIM may observe without meeting the qualifications in this subsection, but recommendations for the treatment of any unanticipated finds will be considered advisory only and will need approval from the CRS or alternate CRS to be implemented. SIMs without sufficient professional qualifications cannot act as or in place of a CRM.

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

- B) An A.S. or A.A. degree in anthropology, archaeology, historical archaeology, or a related field, and four years experience monitoring in California; or
- C) Enrollment in upper division classes pursuing a degree in the fields of anthropology, archaeology, historical archaeology, or a related field, and two years of monitoring experience in California.

Verification: Preferably at least 120 days, but in any event no less than 75 days prior to the start of ground disturbance, the project owner shall submit the resumes for the CRS, the alternate CRS(s) if desired, and the PHA to the CPM for review and approval.

- A) At least 65 days prior to the start of data recovery on known archaeological sites, the project owner shall confirm in writing to the CPM that the approved CRS (or alternate CRS) and PHA will be available for on-site work and are prepared to implement the cultural resources conditions of certification.
 - B) At least 10 days prior to a termination or release of the CRS, or within 10 days after the resignation of a CRS, the project owner shall submit the resume of the proposed new CRS to the CPM for review and approval. At the same time, the project owner shall also provide the AFC and all cultural resources documents, field notes, photographs, and other cultural resources materials generated by the project to the proposed new CRS. If no alternate CRS is available to assume the duties of the CRS, a monitor may temporarily serve in place of a CRS, for a maximum of three days, to allow ground disturbance to continue uninterrupted. If cultural resources are discovered, ground disturbance shall be halted until there is a CRS or alternate CRS to make a recommendation regarding significance.
 - C) At least 20 days prior to data recovery on known archaeological sites, the CRS shall provide a letter to the CPM for review and approval, naming anticipated field crew members for the project, providing resumes or other proof of qualifications, and attesting that the identified field crew members meet the minimum qualifications for cultural resources data recovery required by this Condition.
 - D) At least 20 days prior to ground disturbance, the CRS shall provide a letter to the CPM for review and approval, naming anticipated CRMs for the project providing resumes or other proof of qualifications, and attesting that the identified CRMs meet the minimum qualifications for cultural resources monitoring required by this Condition.
 - E) At least 5 days prior to additional CRMs beginning on-site duties during the project, the CRS shall provide letters to the CPM for review and approval, identifying the new CRMs, providing resumes or other proof of qualifications, and attesting to their qualifications.
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CUL-3: PROJECT DOCUMENTATION FOR CULTURAL RESOURCES PERSONNEL

Prior to the start of ground disturbance, the project owner shall provide the CRS and PHA with copies of the AFC, data responses, confidential cultural resources documents, Staff Assessment (SA), and any subsequent revised or supplemental SA. The project owner shall also provide the CRS, PHA, and CPM with maps and drawings showing the footprints of the power plant, all linear facility routes, all access roads, and all laydown areas. Maps shall include the appropriate USGS quadrangles and maps at an appropriate scale (e.g., 1:2400 or 1" = 200') for plotting cultural features or materials. If the CRS requests enlargements or strip maps for linear facility routes, the project owner shall provide copies to the CRS and CPM. The CPM shall review map submittals and, in consultation with the CRS, approve those that are appropriate for use in cultural resources planning activities. No ground disturbance shall occur prior to CPM approval of maps and drawings, unless such activities are specifically approved by the CPM.

If construction of the project would proceed in phases, maps and drawings not previously provided shall be provided to the CRS, PHA, and CPM prior to the start of each phase. Written notice identifying the proposed schedule of each project phase shall be provided to the CRS and CPM.

Until ground disturbance is completed, the project construction manager shall provide the CRS and CPM with a schedule of project activities for the following week, including the identification of area(s) where ground disturbance will occur. The project owner shall notify the CRS and CPM of any changes to the schedule of construction phases.

Verification:

- A) Preferably at least 115 days, but in any event no less than 60 days prior to the start of ground disturbance, the project owner shall provide the CRS, PHA, and CPM with copies of the AFC, data responses, confidential cultural resources documents, the Staff Assessment (SA), and any revised or supplemental SAs. The project owner shall also provide the CRS, PHA, and CPM with the subject maps and drawings. Staff, in consultation with the CRS, and PHA, will review and approve maps and drawings as suitable for cultural resources monitoring and data recovery activities.
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure
<ul style="list-style-type: none"> B) At least 15 days prior to the start of ground disturbance, if there are changes to any project-related footprint, the project owner shall provide revised maps and drawings for the changes to the CRS, PHA, and CPM. C) At least 15 days prior to the start of each phase of a phased project, the project owner shall submit the appropriate maps and drawings, if not previously provided, to the CRS, PHA, and CPM. D) Weekly, during ground disturbance, a schedule of anticipated following week's project activity shall be provided to the CRS and CPM by letter, e-mail, or fax. E) Within 5 days of changing the scheduling of phases of a phased project, the project owner shall provide written notice of the changes to the CRS and CPM.
<p>CUL-4: CULTURAL RESOURCES MONITORING AND MITIGATION PLAN</p>
<p>Prior to the start of ground disturbance, the project owner shall submit the Cultural Resources Monitoring and Mitigation Plan (CRMMP), as prepared by or under the direction of the CRS, with the contributions of the PHA, to the CPM for review and approval. The authors' name(s) shall appear on the title page of the CRMMP. The CRMMP shall specify the impact mitigation protocols for all known cultural resources and identify general and specific measures to minimize potential impacts to all other cultural resources, including those discovered during construction. Implementation of the CRMMP shall be the responsibility of the CRS and the project owner. Copies of the CRMMP shall reside with the CRS, alternate CRS, PHA, each CRM, and the project owner's on-site construction manager. No ground disturbance shall occur prior to CPM approval of the CRMMP, unless such activities are specifically approved by the CPM. Prior to certification, the project owner may have the CRS, alternate CRS, and PHA complete and submit the CRMMP to the CPM for review and approval, except for those portions to be contributed by the DTCCL programs.</p>
<p>The CRMMP shall include, but is not limited to, the elements and measures listed below.</p>
<ul style="list-style-type: none"> A) The following statement shall be included in the Introduction: "Any discussion, summary, or paraphrasing of the Conditions of Certification in this CRMMP is intended as general guidance and as an aid to the user in understanding the Conditions and their implementation. The conditions, as written in the Commission Decision, shall supersede any summarization, description, or interpretation of the conditions in the CRMMP. The Cultural Resources Conditions of Certification from the Commission Decision are contained in Appendix A. B) The duties of the CRS shall be fully discussed, including coordination duties with respect to the completion of the Desert Training Center California-Arizona Maneuver Area Cultural Landscape (DTCCL) documentation and possible NRHP nomination oversight/management duties with respect to site evaluation, data collection, monitoring, and reporting at both known prehistoric and historic-period archaeological sites and any CRHR-eligible (as determined by the CPM) prehistoric and historic-period archaeological sites discovered during construction. C) A general research design shall be developed that: <ul style="list-style-type: none"> 1) Charts a timeline of all research activities, including those coordinated under the DTCCL documentation and possible NRHP nomination program; 2) Recapitulates the existing historic contexts developed in the DTCCL historic context and adds to these the additional context of the non-military, historic-period occupation and use of the Rice Valley, to create a comprehensive historic context for the RSEP vicinity; 3) Poses archaeological research questions and testable hypotheses specifically applicable to the archaeological resource types known for Rice Valley, based on the research questions developed under the DTCCL research and on the archaeological and historical literature pertinent to Rice Valley; and 4) Clearly articulates why it is in the public interest to address the research questions that it poses. D) Protocols, consistent with the guidance provided in CUL-9, shall be specified for the treatment of known and newly discovered prehistoric and historic-period archaeological resource types. E) Artifact collection, retention/disposal, and curation policies shall be discussed, as related to the research questions formulated in the research design. These policies shall apply to cultural resources materials and documentation resulting from evaluation and data recovery at both known prehistoric and historic-period archaeological sites and any CRHR- or NRHP-eligible (as determined by the CPM) prehistoric and historic-period archaeological sites discovered during construction. A prescriptive treatment plan

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

may be included in the CRMMP for limited data types.

- F) The implementation sequence and the estimated time frames needed to accomplish all project-related tasks prior to and during the ground-disturbance and post-ground-disturbance analysis phases of the project shall be specified, taking into consideration any pre-construction ground disturbances that may require biological monitoring.
- G) Person(s) expected to perform each of the tasks, their responsibilities, and the reporting relationships between project construction management and the mitigation and monitoring team shall be identified.
- H) All impact-avoidance measures (such a flagging or fencing) to prohibit or otherwise restrict access to sensitive resource areas that are to be avoided during ground disturbance, construction, and/or operation shall be described. Any areas where these measures are to be implemented shall be identified. The description shall address how these measures would be implemented prior to the start of ground disturbance and how long they would be needed to protect the resources from project-related impacts.
- I) The commitment to record on Department of Parks and Recreation (DPR) 523 forms, to map, and to photograph all encountered cultural resources over 50 years of age shall be stated. In addition, the commitment to curate all archaeological materials retained as a result of the archaeological investigations (survey, testing, data recovery), in accordance with the California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections, into a retrievable storage collection in a public repository or museum shall be stated.
- J) The commitment of the project owner to pay all curation fees for artifacts recovered and for related documentation produced during cultural resources investigations conducted for the project shall be stated. The project owner shall identify a curation facility that could accept cultural resources materials resulting from RSEP cultural resources investigations.
- K) The CRS shall attest to having access to equipment and supplies necessary for site mapping, photography, and recovery of all cultural resource materials (that cannot be treated prescriptively) from known CRHR-eligible archaeological sites and from CRHR-eligible sites that are encountered during ground disturbance .
- L) The contents, format, and review and approval process of the final Cultural Resource Report (CRR) shall be described.

Verification:

- A) Preferably at least 90 days, but in any event no less than 30 days prior to the start of site mobilization, the project owner shall submit the CRMMP to the CPM for review and approval.
 - B) At least 20 days prior to the start of site mobilization, in a letter to the CPM, the project owner shall agree to pay curation fees for any materials generated or collected as a result of the archaeological investigations (survey, testing, data recovery).
 - C) At least 30 days prior to the initiation of site mobilization, the project owner shall provide to the CPM a copy of a letter from a curation facility that meets the standards stated in the California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections, stating the facility's willingness and ability to receive the materials generated by RSEP cultural resources activities and requiring curation. Any agreements concerning curation will be retained and available for audit for the life of the project.
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CUL-5: CULTURAL RESOURCES REPORT (CRR)

The project owner shall submit the final Cultural Resources Report (CRR) to the CPM for review and approval and to Western's archaeologist for review and comment. The final CRR shall be written by or under the direction of the CRS. The final CRR shall report on all field activities including dates, times and locations, results, samplings, and analyses. All survey reports, revised and final Department of Parks and Recreation (DPR) 523 forms, data recovery reports, and any additional research reports not previously submitted to the California Historical Resource Information System (CHRIS) and the State Historic Preservation Officer (SHPO) shall be included as appendices to the final CRR.

If the project owner requests a suspension of ground disturbance and/or construction activities, then a draft CRR that covers all cultural resources activities associated with the project shall be prepared by the CRS and submitted to the CPM, BLM Palm Springs archaeologist, and Western's archaeologist for review and approval on the same day as the suspension/extension request. The draft CRR shall be retained at the project site in a secure facility until ground disturbance and/or construction resumes or the project is withdrawn. If

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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the project is withdrawn, then a final CRR shall be submitted to the CPM for review and approval at the same time as the withdrawal request.

Verification:

- A) Within 30 days after requesting a suspension of construction activities, the project owner shall submit a draft CRR to the CPM for review and approval.
 - B) Within 180 days after completion of ground disturbance (including landscaping), the project owner shall submit the final CRR to the CPM for review and approval and to the BLM Palm Springs archaeologist and Western's archaeologist for review and comment. If any reports have previously been sent to the CHRIS, then receipt letters from the CHRIS or other verification of receipt shall be included in an appendix.
 - C) Within 10 days after the CPM, BLM's archaeologist, and Western's archaeologist approve the CRR, the project owner shall provide documentation to the CPM confirming that copies of the final CRR have been provided to the SHPO, the CHRIS, the curating institution, if archaeological materials were collected, and to the Tribal Chairpersons of any Native American groups requesting copies of project-related reports.
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CUL-6: WORKER ENVIRONMENTAL AWARENESS PROGRAM (WEAP)

Prior to and for the duration of ground disturbance, the project owner shall provide Worker Environmental Awareness Program (WEAP) training to all new workers within their first week of employment at the project site, along the linear facilities routes, and at laydown areas, roads, and other ancillary areas. The training shall be prepared by the CRS, may be conducted by any member of the archaeological team, and may be presented in the form of a video. The CRS shall be available (by telephone or in person) to answer questions posed by employees. The training may be discontinued when ground disturbance is completed or suspended, but must be resumed when ground disturbance, such as landscaping, resumes.

The training shall include:

- A) A discussion of applicable laws and penalties under the law;
- B) Samples or visuals of artifacts that might be found in the project vicinity;
- C) A discussion of what such artifacts may look like when partially buried, or wholly buried and then freshly exposed;
- D) A discussion of what prehistoric and historical archaeological deposits look like at the surface and when exposed during construction, and the range of variation in the appearance of such deposits;
- E) Instruction that the CRS, alternate CRS, and CRMs have the authority to halt ground disturbance in the area of a discovery to an extent sufficient to ensure that the resource is protected from further impacts, as determined by the CRS;
- F) Instruction that employees are to halt work on their own in the vicinity of a potential cultural resources discovery and shall contact their supervisor and the CRS or CRM, and that redirection of work would be determined by the construction supervisor and the CRS;
- G) An informational brochure that identifies reporting procedures in the event of a discovery;
- H) An acknowledgement form signed by each worker indicating that they have received the training; and
- I) A sticker that shall be placed on hardhats indicating that environmental training has been completed.
- J) No ground disturbance shall occur prior to implementation of the WEAP program, unless such activities are specifically approved by the CPM.

Verification:

- A) At least 30 days prior to the beginning of ground disturbance the CRS shall provide the training program draft text and graphics and the informational brochure to the CPM for review and approval.
 - B) At least 15 days prior to the beginning of ground disturbance, the CPM will provide the project owner with a WEAP Training Acknowledgement form for each WEAP trained
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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<p>worker to sign.</p> <p>C) Monthly, until ground disturbance is completed, the project owner shall provide, in the Monthly Compliance Report (MCR), the WEAP Training Acknowledgement forms of workers who have completed the training in the prior month and a running total of all persons who have completed training to date.</p>
<p>CUL-7: CONSTRUCTION MONITORING PROGRAM</p> <p>The project owner shall ensure that the CRS, alternate CRS, or CRMs shall monitor, full time, all ground disturbance to prevent construction impacts to undiscovered resources and to ensure that known resources are not impacted in an unanticipated manner.</p> <p>Consistent with the recommendations of the County of Riverside, a Special Interest Monitor (SIM), designated by the General Patton Memorial Museum, shall be allowed to monitor all ground disturbance consistent with the actions of a CRM. Any recommendations offered by the SIM shall be treated as advisory only and must be approved by the CRS or alternate CRS.</p> <p>Full-time archaeological monitoring for this project shall include the archaeological monitoring of ground-disturbing activities by approved CRS or CPM in the areas specified, for as long as the activities are ongoing. Where excavation equipment is actively removing dirt and hauling the excavated material farther than fifty feet from the location of active excavation, full-time archaeological monitoring shall require at least two monitors per excavation area. In this circumstance, one monitor shall observe the location of active excavation and a second monitor shall inspect the dumped material. For excavation areas where the excavated material is dumped no farther than fifty feet from the location of active excavation, one monitor shall both observe the location of active excavation and inspect the dumped material. The research design in the CRMMP shall govern the collection, treatment, retention/disposal, and curation of any archaeological materials encountered.</p> <p>On forms provided by the CPM, CRMs shall keep a daily log of any monitoring and other cultural resources activities and any instances of noncompliance with the Conditions and/or applicable LORS. Copies of the daily monitoring logs shall be provided by the CRS to the CPM, if requested by the CPM. From these logs, the CRS shall compile a monthly monitoring summary report to be included in the MCR. If there are no monitoring activities, the summary report shall specify why monitoring has been suspended.</p> <p>The CRS or alternate CRS shall report daily to the CPM on the status of the project's cultural resources-related activities, unless reducing or ending daily reporting is requested by the CRS and approved by the CPM. In the event that the CRS believes that the current level of monitoring is not appropriate in certain locations, a letter or e-mail detailing the justification for changing the level of monitoring shall be provided to the CPM for review and approval prior to any change in the level of monitoring. The CRS, at his or her discretion, or at the request of the CPM, may informally discuss cultural resources monitoring and mitigation activities with Energy Commission technical staff.</p> <p>Cultural resources monitoring activities are the responsibility of the CRS. Any interference with monitoring activities, removal of a monitor from duties assigned by the CRS, or direction to a monitor to relocate monitoring activities by anyone other than the CRS shall be considered non-compliance with these Conditions of Certification.</p> <p>Upon becoming aware of any incidents of non-compliance with the Conditions and/or applicable LORS, the CRS and/or the project owner shall notify the CPM by telephone or e-mail within 24 hours. The CRS shall also recommend corrective action to resolve the problem or achieve compliance with the Conditions. When the issue is resolved, the CRS shall write a report describing the issue, the resolution of the issue, and the effectiveness of the resolution measures. This report shall be provided in the next MCR for the review of the CPM.</p> <p>Verification:</p> <p>A) At least 30 days prior to the start of ground disturbance, the CPM shall provide to the CRS an electronic copy of a form to be used as a daily monitoring log.</p> <p>B) Monthly, while monitoring is on-going, the project owner shall include, in each MCR, a copy of the monthly summary report of cultural resources-related monitoring prepared by the CRS and shall attach any new DPR 523A forms completed for finds treated prescriptively, as specified in the CRMMP.</p> <p>C) At least 24 hours prior to implementing a proposed change in monitoring level, the project owner shall submit to the CPM, for review and approval, a letter or e-mail (or some other form of communication acceptable to the CPM) detailing the CRS's justification for changing the monitoring level.</p> <p>D) Daily, as long as no cultural resources are found, the CRS shall provide a statement that "no cultural resources over 50 years of age were discovered" to the CPM as an e-mail or in some other form of communication acceptable to the CPM.</p>

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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- E) At least 24 hours prior to reducing or ending daily reporting, the project owner shall submit to the CPM, for review and approval, a letter or e-mail (or some other form of communication acceptable to the CPM) detailing the CRS's justification for reducing or ending daily reporting.
 - F) No later than 30 days following the discovery of any Native American cultural materials, the project owner shall submit, to the CPM, copies of the information transmittal letters sent to the Chairpersons of the Native American tribes or groups who requested the information. Additionally, the project owner shall submit to the CPM copies of letters of transmittal for all subsequent responses to Native American requests for notification, consultation, and reports and records.
 - G) The project owner shall submit to the CPM copies of any comments or information provided by Native Americans in response to the project owner's transmittals of information within 15 days of receipt.
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CUL-8: AUTHORITY TO HALT CONSTRUCTION; TREATMENT OF DISCOVERIES

The project owner shall grant authority to halt ground disturbance to the CRS, alternate CRS, PHA, and the CRM's in the event of a discovery. Redirection of ground disturbance shall be accomplished under the direction of the construction supervisor in consultation with the CRS.

If human remains are found, the project owner shall follow the requirements of the State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98(b). The Riverside County Coroner shall be notified and remains shall be left in place and free from disturbance until the final decision as to the treatment and their disposition has been made. If the remains are determined to be Native American, the Native American Heritage Commission (NAHC) shall be contacted within the period specified by law. Subsequently, the NAHC shall identify the "Most Likely Descendant." The Most Likely Descendant shall then make recommendations and engage in consultation concerning the treatment of the remains. Human remains from other ethnic/cultural groups with recognized historical associations to the project area shall also be subject to consultation among appropriate interested parties, CPM, Riverside County, and federal agency representatives (if the find occurs on federal public lands).

For unanticipated finds, excluding human remains, if a cultural resource over 50 years of age is found (or if younger, determined exceptionally significant by the CPM), or impacts to such a resource can be anticipated, ground disturbance shall be halted within a minimum of 100 feet of the find or redirected in the immediate vicinity of the discovery sufficient to ensure that the resource is protected from further impacts. Monitoring and daily reporting, as provided in other conditions, shall continue during the project's ground-disturbing activities elsewhere. The halting or redirection of ground disturbance shall remain in effect until the CRS has visited the discovery, and all of the following have occurred:

- A) The CRS has notified the project owner and the CPM has been notified within 24 hours of the discovery, or by Monday morning if the cultural resources discovery occurs between 8:00 AM on Friday and 8:00 AM on Sunday morning, including a description of the discovery (or changes in character or attributes), the action taken (i.e., work stoppage or redirection), a recommendation of CRHR eligibility, and recommendations for data recovery from any cultural resources discoveries, whether or not a determination of CRHR eligibility has been made.
- B) If the discovery would be of interest to Native Americans, the CRS has notified all Native American groups that expressed a desire to be notified in the event of such a discovery.
- C) The CRS has completed field notes, measurements, and photography for a DPR 523 "Primary" form. Unless the find can be treated prescriptively, as specified in the CRMMP, the "Description" entry of the DPR 523 "Primary" form shall include a recommendation on the CRHR eligibility of the discovery. The project owner shall submit completed forms to the CPM.
- D) The CRS, the project owner, and the CPM have conferred, and the CPM has concurred with the recommended eligibility of the discovery and approved the CRS's proposed data recovery plan, if any, including the curation of the artifacts, or other appropriate mitigation; and any necessary data recovery and mitigation have been completed.

Verification:

- A) At least 30 days prior to the start of ground disturbance, the project owner shall provide the CPM and CRS with a letter confirming that the CRS, alternate CRS, PHA, and CRMs have the authority to halt ground disturbance in the vicinity of a cultural resources discovery, and that the project owner shall ensure that the CRS notifies the CPM within 24 hours of a discovery, or by Monday morning if the cultural resources discovery occurs between 8:00 AM on Friday and 8:00 AM on Sunday morning.
 - B) Within 48 hours of the discovery of a resource of interest to Native Americans, the project owner shall ensure that the CRS notifies all Native American groups that
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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expressed a desire to be notified in the event of such a discovery.

- C) Unless the discovery can be treated prescriptively, as specified in the CRMMP, completed DPR 523 forms for resources newly discovered during ground disturbance shall be submitted to the CPM for review and approval no later than 24 hours following the notification of the CPM, or 48 hours following the completion of data recordation/recovery, whichever the CRS decides is more appropriate for the subject cultural resource.
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CUL-9: DATA RECOVERY FOR RICE ARMY AIR FIELD AND CAMP RICE FEATURES

Prior to the start of ground disturbance, the project owner shall ensure that feature forms for all historic-period features at Rice Army Airfield and Camp Rice are completed to the satisfaction of the CPM. The focus of the recordation is to recover any additional data associated with these features before they are destroyed during construction. A plan shall specify in detail the location recordation equipment and methods to be used and describe any anticipated post-processing of the data. The project owner shall then ensure that the CRS, the PHA, and/or archaeological team members implement the plan, if allowed by the CPM, which shall include, but is not limited to the following tasks:

- A) The project owner shall hire a PHA with the qualifications described in CUL-2 to supervise the fieldwork.
 - B) The project owner shall ensure that, prior to beginning the fieldwork, the PHA and all field crew members are trained by the DTCCL Historical Archaeologist, or equivalent qualified person approved by the CPM and hired by the project owner should the DTCCL Historical Archaeologist not be available, in the identification, analysis and interpretation of the artifacts, environmental modifications, and trash disposal patterns associated with the early phases of WWII land-based U.S. Army activities, as researched and detailed by the DTCCL PI-Historian and the DTCCL Historical Archaeologist.
 - C) The project owner shall ensure that, prior to beginning the fieldwork, the field crew members are also trained in the consistent and accurate identification of the full range of late nineteenth and early-to-mid-twentieth-century can, bottle, and ceramic diagnostic traits.
 - D) The project owner shall ensure that the original site map shall be updated to include at minimum: landform features such as small drainages, any man-made features, the limits of any artifact concentrations and features (previously known and newly found in the geophysical survey), using geographic positioning system recordation equipment with sub-meter accuracy capable of recording locational data in a standard geo-reference grid coordinate system (such as UTM 11 North or California Teale Albers).
 - E) The project owner shall ensure that a detailed in-field analysis of a representative sample of diagnostic artifacts shall be completed, documenting the measurements and the types of seams and closures for each bottle, and the measurements, seams, closure, and opening method for all cans. Photographs shall be taken of maker's marks on bottles, any text or designs on bottles and cans, and of decorative patterns and maker's marks on ceramics. Artifacts shall not be collected.
 - F) The project owner shall ensure a systematic geophysical survey of portions of the airfield is completed with inclusive coverage of the northern end of the site, where most of the military activities occurred, to identify and map the distribution of near-surface and buried materials/features. This survey shall be conducted with a mobile electromagnetic instrument and high-resolution GPS unit, measuring both conductivity and magnetic susceptibility (metal detection).
 - G) The project owner shall ensure that features having subsurface elements, including those identified in the geophysical survey, are excavated by a qualified historical archaeologist. All features and contents must be mapped, measured, photographed, and fully described in writing.
 - H) The project owner shall ensure that the details of what is found at each Rice Army Airfield feature or new site shall be presented in a letter report from the CRS or PHA which shall serve as a preliminary report, that details what was found at each feature, as follows:
 - 1) Letter reports may address one feature or multiple features depending on the needs of the CRS; and
 - 2) The letter report shall be a concise document that provides a description of the schedule and methods used in the field effort, a preliminary tally of the numbers and types of features and deposits that were found, a discussion of the potential range of error for that tally, and a map showing the location of collection and/or excavation units, including topographic contours and the feature landforms.
 - 3) The letter report shall make a recommendation on whether each feature is a contributor to the DTTCL.
 - I) The project owner shall ensure that the data collected from the fieldwork shall be provided to the DTCCL Historical Archaeologist to assist in the determination of which, if
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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any, of the historic-period sites are contributing elements to the DTCCL.

- J) The project owner shall ensure that the PHA analyzes all recovered data and writes or supervises the writing of a comprehensive final report. This report shall be included in the CRR (CUL-5). Relevant portions of the information gathered may be included in the possible NRHP nomination for the DTCCL (funded by CUL-1).

Verification:

- A) At least 90 days prior to ground disturbance, the project owner shall notify the CPM that mapping and upgraded in-field artifact analysis has ensued.
- B) At least 60 days prior to ground disturbance, the project owner shall submit to the CPM for review and approval feature records and a letter report written by the CRS, evidencing that the field portion of data recovery at each particular feature has been completed and evaluating whether the feature contributes to the overall eligibility of the property consistent with the requirements of the CRMMP. When the CPM approves the letter report, ground disturbance may begin at the feature location(s) that are the subject of the letter report.
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CUL-10: COMPLIANCE COORDINATION WITH FEDERAL SECTION 106 MOA

If stipulations in the RSEP Section 106 Memorandum of Agreement (MOA), should such a document be prepared and executed, conflict in a mutually exclusive manner with or precisely duplicate the conditions of certification in the Energy Commission Decision, the MOA provisions shall take precedence. Where provisions for the implementation of historic preservation treatments in the conditions of certification are in addition to or exceed such provisions in the MOA, the applicant shall implement treatment in a manner that fulfills both the provisions of the MOA and the conditions of certification. Where the Applicant believes that a mutually exclusive conflict exists between these conditions and the provisions in the MOA, or that the said conditions and provisions appear to require a precisely duplicative effort, the applicant shall submit, for the review and approval of the CPM, formal correspondence that states the applicant's determination that such a conflict or effort exists and provides evidentiary support for that determination. Where provisions in the conditions of compliance appear to augment or exceed the provisions in the MOA, the project owner shall coordinate historic preservation treatment with the CPM. Such coordination may, at the discretion of the project owner, be on a formal or informal basis. However, the CPM shall make the final determination of the consistency of project activities with Energy Commission conditions of compliance.

Verification: Prior to the implementation of any historic preservation treatments in these conditions that may conflict in a mutually exclusive manner with any analogous treatments that a Federal MOA may provide or that may precisely duplicate such analogous treatments, the project owner shall consult with the CPM concerning any such conflicts and provide, for the review and approval of the CPM, formal correspondence that relates the outcome of said consultation, states the project owner's determination that a mutually exclusive conflict or precisely duplicative effort exists, and provides evidentiary support for that determination. The project owner shall not proceed with the implementation of any historic preservation treatments that are subject to consultation under this condition until the CPM approves the applicant's determination thereon.

CUL-11: HISTORIC INTERPRETIVE ROADSIDE STOP

Prior to the start of construction, the project owner shall provide conceptual plans for the Historic Interpretive Roadside Stop (HIRS or Roadside Stop) to the CPM for review and approval. Prior to commercial operation of RSEP, the project owner shall provide the final plans for the Roadside Stop to Western, BLM, and Riverside County for review and comment, and to the CPM for review and approval. Construction of the Roadside Stop shall be completed prior to the start of commercial operations. The project owner's plans for the Roadside Stop shall be coordinated with Caltrans and Riverside County, and shall be developed in a manner that does not compromise site or public safety or security.

The Roadside Stop shall include and make accessible to the public the following features:

- A) An encroachment off SR 62 to the Roadside Stop and vehicle parking area, consistent with Caltrans, Riverside County, and the Americans with Disabilities Act (ADA) access and parking requirements. The vehicle parking area shall include:
- 1) Four (4) parking spaces, including one van-accessible ADA-compliant parking space.
 - 2) The parking spaces and encroachment shall provide a level, all-weather surface, preferably of compacted rock, decomposed granite, or similar permeable material, or as required by Caltrans.
- B) An interpretive kiosk, protected by a shade structure, that displays a minimum of five (5) panels of text and graphics that illustrate and interpret Rice AAF and Camp Rice as
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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individual historic features and as components of the larger DTC/C-AMA. Access to the kiosk shall be handicap-accessible, over a level, all-weather surface, preferably of compacted rock, decomposed granite, or similar permeable material, or paved with asphalt concrete, consistent with Riverside County paving requirements and Caltrans encroachment requirements.

- C) Self-closing, wildlife-resistant trash cans;

Verification:

- A) At least 30 days prior to the start of construction, the project owner shall submit conceptual plans for the Roadside Stop to Western, BLM, and Riverside County for review and comment, and to the CPM for review and approval.
- B) No later than one year following start of construction, the project owner shall submit final plans for the Roadside Stop to Western, BLM, and Riverside County for review and comment, and to the CPM for review and approval.
- C) At least 30 days prior to the start of commercial operation, the project owner shall complete construction of the Roadside Stop and submit photographic proof of completion to the CPM for review and approval. The roadside stop shall be made accessible to the public within 10 days from the start of commercial operations and shall be maintained by the project owner for the life of the project.
- D) In each Annual Compliance Report, the project owner shall provide a summary of the following:
- 1) Estimated public visitation to the Roadside Stop;
 - 2) Any issues associated with operating and maintenance;
 - 3) Proposed maintenance and improvements, and a schedule for completion;
 - 4) A log of all completed maintenance and improvements to the Roadside Stop from the start of RSEP commercial operation to the present day.
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CUL-12: FLAG AND AVOID

Resources just outside the northwestern portion of the main facility circular footprint would be preserved through avoidance. Previously recorded resources along Western's Parker Dam-Blythe Transmission Line No. 2, subject to possible project impacts associated with installation of the fiber optical cable (if this telecommunication option is implemented), shall be revisited prior to construction. In the event that new resources are discovered during construction or previously recorded resources would be additionally affected, where impacts can be reduced or avoided, the project owner shall:

- A) Ensure that a CRS, alternate CRS or CRM re-establish the boundary of each site, add a 10-meter-wide buffer around the periphery of each site boundary, and flag the resulting space in a conspicuous manner;
- B) Ensure that a CRM enforces avoidance of the flagged areas during RSEP construction; and
- C) Ensure, after completion of construction, boundary markings around each site and buffer are removed so as not to attract vandals.
- D) Site records for previously documented resources shall be updated.

Verification: Within 90 days of transmission line construction, the project owner shall submit for CPM review and approval, site record updates of resources subject to possible impacts. Within 90 days of the completion of plant construction, the project owner shall submit for CPM review and approval a letter, with photograph and maps, evidencing the removal of boundary markings.

CUL-13: HISTORIC INTERPRETIVE DOCUMENTARY

The project owner shall produce a high-definition, broadcast quality documentary of the Rice Army Airfield (Rice AAF), Camp Rice, and the surrounding DTC/C-AMA cultural

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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landscape, focusing on the integration and contributions of the Rice AAF and Camp Rice, to the DTC/C-AMA WWII military training mission, from an aviation perspective. Costs for the documentary (including pre- and post-production costs) shall not be required to exceed the industry average of \$4,500 per minute. The final edited documentary shall be at least 26 minutes in length, excluding titles and credits. An approximately 10-minute abbreviated version of the documentary shall also be produced using primarily material from the 26-minute documentary.

- A) Prior to the start of filming, the project owner shall provide the qualifications of the proposed production company to the Executive Director of the General Patton Memorial Museum for review and comment, and to the CPM for review and approval. The production company shall have experience in the creation of historic documentary-style videos, and shall provide evidence of the successful completion of at least three videos of similar quality from project development to release. A copy of any scope of work related to the production of the documentary shall be submitted to the CPM within 10 days of execution.
 - B) Prior to the start of filming, the project owner shall also submit the resume of a proposed production advisor to the CPM for review and approval. The production advisor, shall be a qualified historian, with training and experience consistent with the requirements of the U.S. Secretary of Interior's Professional Qualifications Standards, as published in Title 36, Code of Federal Regulations, part 61. In addition, the advisor must have experience researching and documenting historic military resources, preferably within the DTC/C-AMA. The production advisor shall provide direction during production and post-production to ensure historical accuracy and to provide assistance obtaining historic WWII documentation (e.g., military film and training footage, news clips, still photos, audio and written transcripts of interviews) and the most recent information on Camp Rice and the Rice AAF in particular, and the DTC/C-AMA in general.
 - C) Prior to the start of site mobilization, the production company shall take the initial aerial footage of the remains of the Rice AAF and Camp Rice facilities along with representative features and training fields surrounding the project area, as necessary to convey the context of the Rice AAF and Camp Rice within the DTC/C-AMA. Aerial footage may also document the remains of other facilities and features in the project vicinity that are integral or contributing to the DTC/C-AMA cultural landscape, including airfields, camps, bombing ranges, and the King's Throne (where Patton sat to observe maneuvers). Historic film; still photos; re-creations; interview footage and audio tracks; and compatible, high-quality video footage of the subject areas taken prior to current filming may also be integrated into the final product. The original acquisition format shall be high definition, 16X9, 1080p digital format, using broadcast-level cameras and lenses. The aerial documentation shall be photographed using a television motion picture, industry-accepted camera stabilization system, mounted to a helicopter.
 - D) Prior to the start of production editing, the project owner shall submit a first draft script, storyboard, and description of other related project elements, including proposed finished length of the documentary (a minimum of 26 minutes of edited footage for the full-length version and 10 minutes for the abbreviated (excerpt) version), to the DTCCCL PI-Historian, production advisor, and Executive Director of the General Patton Memorial Museum for review and comment, and to the CPM for review and approval.
 - E) Prior to the start of commercial plant operations, the project owner shall submit the final cut, with voice-over and background music track, along with packaging proofs, including sample cover, disk label, and packaging materials, to the DTCCCL PI- Historian, production advisor, and Executive Director of the General Patton Memorial Museum for review and comment, and to the CPM for review and approval.
 - F) Concurrent with the start of commercial plant operations, the project owner shall provide the final approved full-length documentary to the General Patton Memorial Museum in a high definition format, suitable for mass market duplication, along with 500 DVD copies and 100 BluRay copies of the full-length packaged documentary, suitable for resale. Ten DVD copies and five BluRay copies of the packaged documentary shall also be provided to the BLM Palm Springs-South Coast Field Office, Western, and the CPM. The 10-minute excerpt shall be provided to all parties in a digital format compatible with display requirements of the Museum and webcasting requirements of BLM, Western, and the Energy Commission.
 - G) In conjunction with delivery of the final approved documentary in the designated format, the project owner shall provide a letter to the General Patton Memorial Museum confirming that the Museum is assigned and shall exclusively retain all DVD, BluRay, and video reproduction and sales rights, and broadcast television distribution rights of the production, both foreign and domestic, excepting use of excerpts from the documentary [including the 10-minute abbreviated documentary on any Bureau of Land Management, Western, or Energy Commission website related to DTC/C-AMA, southern California Desert history, or renewable energy projects within former DTC/C-AMA areas. The letter shall also confirm that the production company may retain copies of the production specifically for promotional and demonstration purposes only. Copies of the letter shall be sent to the CPM, BLM, Western, and the production company representative.
 - H) The project owner shall ensure that all raw footage acquired during the production of the documentary is submitted to the DTCCCL PI-Historian for use in the DTCCCL study. Use of the footage for research purposes shall not be restricted. Ten DVD copies and five BluRay copies of the packaged documentary shall also be provided to the DTCCCL
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Mitigation Measure
PI-Historian.
Verification:
<ul style="list-style-type: none"> A) At least 15 days prior to the start of filming, the project owner shall provide the qualifications of the proposed production company to the Executive Director of the General Patton Memorial Museum for review and comment, and to the CPM for review and approval. A copy of the scope of work associated with any contract related to the production of the documentary shall be submitted to the CPM within 10 days of execution. B) At least 15 days prior to the start of filming, the project owner shall also submit the resume of a proposed production advisor to the CPM for review and approval. The production advisor, shall be a qualified historian, with training and experience consistent with the requirements of the U.S. Secretary of Interior's Professional Qualifications Standards, as published in Title 36, Code of Federal Regulations, part 61. In addition, the advisor must have experience researching and documenting historic military resources, preferably within the DTC/C-AMA. C) Prior to the start of site mobilization, the production company shall take the initial aerial footage of the remains of the Rice AAF and Camp Rice facilities along with representative features and training fields surrounding the project area, as necessary to convey the context of the Rice AAF and Camp Rice within the DTC/C-AMA. The original acquisition format shall be high definition, 16X9, 1080p digital format, using broadcast-level cameras and lenses. The aerial documentation shall be photographed using a television motion picture, industry-accepted camera stabilization system, mounted to a helicopter. D) At least 30 days prior to the start of production editing, the project owner shall submit a first draft script, storyboard, and description of other related project elements, including proposed finished length of the documentary (a minimum of 26 minutes of edited footage), to the DTCCL PI-Historian, production advisor, and Executive Director of the General Patton Memorial Museum for review and comment, and to the CPM for review and approval. E) At least 90 days prior to the start of commercial plant operations, the project owner shall submit the final cut, with voice-over and background music track, along with packaging proofs, including sample cover, disk label, and packaging materials, to the DTCCL PI-Historian, production advisor, and Executive Director of the General Patton Memorial Museum for review and comment, and to the CPM for review and approval. F) Concurrent with the start of commercial plant operations, the project owner shall provide the final approved documentary to the General Patton Memorial Museum in a high definition format, suitable for mass market duplication, along with 500 DVD copies and 100 BluRay copies of the full-length packaged documentary, suitable for resale. Ten DVD copies and five BluRay copies of the packaged documentary shall also be provided to the BLM Palm Springs-South Coast Field Office, Western, and the CPM. G) In conjunction with delivery of the final approved documentary in the designated format, the project owner shall provide a letter to the Executive Director of the General Patton Memorial Museum confirming that the Museum is assigned and shall exclusively retain all DVD, BluRay, and video reproduction and sales rights, and broadcast television distribution rights of the production, both foreign and domestic, excepting use of excerpts from the documentary (including the 10- minute abbreviated documentary referenced in CUL-14) on any Bureau of Land Management, Western, or Energy Commission website related to DTC/C-AMA, military history, or energy projects in the southern California desert. The letter shall also confirm that the production company may retain copies of the production specifically for promotional and demonstration purposes only. Copies of the letter shall be sent to the CPM, BLM, Western, and the production company representative. H) Within 30 days from the start of construction, the project owner shall ensure that all raw aerial footage acquired during the production of the documentary is submitted to the DTCCL PI-Historian for use in the DTCCL study. Use of the footage for research purposes shall not be restricted. Ten DVD copies and five BluRay copies of the packaged documentary shall also be provided to the DTCCL PI-Historian.
CUL-14: INTERPRETIVE MATERIALS
<ul style="list-style-type: none"> A) The project owner shall provide the design of at least one single page, double-sided tri-fold brochure and an initial production run of at least 1,000 copies to the General Patton Memorial Museum for public distribution, interpreting the significance of Rice AAF and Camp Rice as individual historical features and as contributing features within the DTC/C-AMA cultural landscape. <ul style="list-style-type: none"> 1) Prior to the final phase of plant construction, the project owner shall submit draft design proof of the brochure to the Executive Director of the General Patton Memorial Museum for review and comment, and to the CPM for review and approval.

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

- 2) Prior to the start of commercial plant operations, the project owner shall submit final design proofs of the brochure to the Executive Director of the General Patton Memorial Museum for review and comment, and to the CPM for review and approval.
- 3) Prior to, or concurrent with the start of commercial plant operations, the project owner shall submit a digital/electronic template of the brochure designs, along with 1,000 copies, suitable for public distribution, to the Executive Director of the General Patton Memorial Museum. The project owner shall also submit the final digital/electronic template of the brochure to the CPM, BLM Palm Springs-South Coast Field Office, and Western. The project owner, Museum, Energy Commission, BLM, and Western shall have authorized use of the initial (and any revised) templates for future production runs for distribution to the public or display on any of the parties' informational websites.
- B) Prior to the start of commercial plant operations, the project owner shall provide a donation in the amount of \$25,000 to the General Patton Memorial Museum. The funds from this donation shall be earmarked for development and installation of displays and signage interpreting contributions of the Rice AAF and Camp Rice to the mission of the DTC/C-AMA at the General Patton Memorial Museum. The resulting interpretive display shall also incorporate a way for the public to view the 10-minute abbreviated documentary excerpt identified in CUL-13 above. Historical information acquired during the DTC Cultural Landscape study, identified in CUL-1 above, shall also be made available to the Museum as a basis for development of the Rice AAF/Camp Rice displays.

Verification:

- A) At least 90 days prior to the completion of construction, the project owner shall submit draft design proofs of the brochure to the Executive Director of the General Patton Memorial Museum for review and comment, and to the CPM for review and approval.
- B) At least 30 days prior to the start of commercial plant operations, the project owner shall submit final design proofs of the brochure to the Executive Director of the General Patton Memorial Museum for review and comment, and to the CPM for review and approval.
- C) Within 30 days from the start of commercial plant operations, the project owner shall submit the final digital/electronic template of the brochure design, along with 1,000 copies, suitable for public distribution, to the Executive Director of the General Patton Memorial Museum. The project owner shall also submit the final digital/electronic template of the brochure to the CPM, BLM Palm Springs-South Coast Field Office, and Western.

PAL

PAL-1: The project owner shall provide the CPM with the resume and qualifications of its Paleontological Resources Specialist (PRS) for review and approval. If the approved PRS is replaced prior to completion of project mitigation and submittal of the Paleontological Resources Report, the project owner shall obtain CPM approval of the replacement PRS. The project owner shall keep resumes on file for qualified paleontological resource monitors (PRMs). If a PRM is replaced, the resume of the replacement PRM shall also be provided to the CPM.

The PRS resume shall include the names and phone numbers of references. The resume shall also demonstrate to the satisfaction of the CPM the appropriate education and experience to accomplish the required paleontological resource tasks.

As determined by the CPM, the PRS shall meet the minimum qualifications for a vertebrate paleontologist as described in the SVP guidelines of 1995. The experience of the PRS shall include the following:

- A) Institutional affiliations, appropriate credentials, and college degree;
 - B) Ability to recognize and collect fossils in the field;
 - C) Local geological and biostratigraphic expertise;
 - D) Proficiency in identifying vertebrate and invertebrate fossils; and
 - E) At least three years of paleontological resource mitigation and field experience in California and at least one year of experience leading paleontological resource mitigation
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure
<p>and field activities.</p> <p>F) The project owner shall ensure that the PRS obtains qualified paleontological resource monitors to monitor as he or she deems necessary on the project. Paleontologic resource monitors shall have the equivalent of the following qualifications:</p> <ol style="list-style-type: none"> 1) BS or BA degree in geology or paleontology and one year of experience monitoring in California; or 2) AS or AA in geology, paleontology, or biology and four years' experience monitoring in California; or 3) Enrollment in upper division classes pursuing a degree in the fields of geology or paleontology and two years of monitoring experience in California. <p>Verification:</p> <p>A) At least 60 days prior to the start of ground disturbance, the project owner shall submit a resume and statement of availability of its designated PRS for on-site work.</p> <p>B) At least 20 days prior to ground disturbance, the PRS or project owner shall provide a letter with resumes naming anticipated monitors for the project and stating that the identified monitors meet the minimum qualifications for paleontological resource monitoring required by the Condition. If additional monitors are obtained during the project, the PRS shall provide additional letters and resumes to the CPM. The letter(s) shall be provided to the CPM no later than one week prior to the monitor's beginning on-site duties.</p> <p>C) Prior to the termination or release of a PRS, the project owner shall submit the resume of the proposed new PRS to the CPM for review and approval.</p>
<p>PAL-2: The project owner shall provide to the PRS and the CPM, for approval, maps and drawings showing the footprint of the power plant, construction lay-down areas, and all related facilities. Maps shall identify all areas of the project where ground disturbance is anticipated. If the PRS requests enlargements or strip maps for linear facility routes, the project owner shall provide copies to the PRS and the CPM. The site grading plan and plan and profile drawings for the utility lines are acceptable for this purpose. The plan drawings shall show the location, depth, and extent of all ground disturbances and be at a scale between 1 inch = 40 feet and 1 inch = 100 feet. If the footprint of the project or its linear facilities changes, the project owner shall provide maps and drawings reflecting those changes to the PRS and the CPM.</p> <p>If construction of the project proceeds in phases, maps and drawings may be submitted prior to the start of each phase. A letter identifying the proposed schedule of each project phase shall be provided to the PRS and CPM. Before work commences on affected phases, the project owner shall notify the PRS and the CPM of any construction phase scheduling changes.</p> <p>At a minimum, the project owner shall ensure that the PRS or PRM consults weekly with the project superintendent or construction field manager to confirm area(s) to be worked the following week and until ground disturbance is completed.</p> <p>Verification:</p> <p>A) At least 30 days prior to the start of ground disturbance, the project owner shall provide the maps and drawings to the PRS and the CPM.</p> <p>B) If there are changes to the footprint of the project, revised maps and drawings shall be provided to the PRS and the CPM at least 15 days prior to the start of ground disturbance.</p> <p>C) If there are changes to the scheduling of the construction phases, the project owner shall submit a letter to the CPM within 5 days of identifying the changes.</p>
<p>PAL-3: The project owner shall ensure that the PRS prepares, and the project owner submits to the CPM for review and approval, a Paleontological Resource Monitoring and Mitigation Plan (PRMMP) to identify general and specific measures to minimize potential impacts to significant paleontological resources. Approval of the PRMMP by the CPM shall occur prior to any ground disturbance. The PRMMP shall function as the formal guide for monitoring, collecting, and sampling activities and may be modified with CPM approval. This document shall be used as the basis of discussion when on-site decisions or changes are proposed. Copies of the PRMMP shall reside with the PRS, each monitor, the project owner's on-site manager, and the CPM.</p>

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

The PRMMP shall be developed in accordance with the guidelines of the SVP (1995) and shall include, but not be limited to, the following:

- A) Assurance that the performance and sequence of project-related tasks such as any literature searches, pre-construction surveys, worker environmental training, fieldwork, flagging or staking, construction monitoring, mapping and data recovery, fossil preparation and collection, identification and inventory, preparation of final reports, and transmittal of materials for curation will be performed according to PRMMP procedures;
- B) Identification of the person(s) expected to assist with each of the tasks identified within the PRMMP and the Conditions of Certification;
- C) A thorough discussion of the anticipated geologic units expected to be encountered, the location and depth of the units relative to the project when known, and the known sensitivity of those units based on the occurrence of fossils either in that unit or in correlative units;
- D) An explanation of why, how, and how much sampling is expected to take place and in what units. Include descriptions of different sampling procedures that shall be used for fine-grained and coarse-grained units;
- E) A discussion of the locations of where the monitoring of project construction activities is deemed necessary, and a proposed plan for monitoring and sampling;
- F) A discussion of procedures to be followed in the event of a significant fossil discovery, halting construction, resuming construction, and how notifications will be performed;
- G) A discussion of equipment and supplies necessary for collection of fossil materials and any specialized equipment needed to prepare, remove, load, transport, and analyze large-sized fossils or extensive fossil deposits;
- H) Procedures for inventory, preparation, and delivery for curation into a retrievable storage collection in a public repository or museum which meets the Society of Vertebrate Paleontology's standards and requirements for the curation of paleontological resources;
- I) Identification of the institution that has agreed to receive data and fossil materials collected, requirements or specifications for materials delivered for curation and how they will be met, and the name and phone number of the contact person at the institution; and
- J) A copy of the paleontological Conditions of Certification.

Verification: At least 30 days prior to ground disturbance, the project owner shall provide a copy of the PRMMP to the CPM. The PRMMP shall include an affidavit of authorship by the PRS and acceptance of the PRMMP by the project owner evidenced by a signature.

PAL-4: Prior to ground disturbance and for the duration of construction activities involving ground disturbance, the project owner and the PRS shall prepare and conduct weekly CPM-approved training for project managers, construction supervisors, foremen, and general workers involved with or who operate ground-disturbing equipment or tools. Workers shall not excavate in sensitive units prior to receiving CPM-approved worker training. Worker training shall consist of an initial in-person PRS training during the project kick-off for those mentioned above. Following initial training, a CPM-approved video or in-person training may be used for new employees. The training program may be combined with other training programs prepared for cultural and biological resources, hazardous materials, or other areas of interest or concern. No ground disturbance shall occur prior to CPM approval of the Worker Environmental Awareness Program (WEAP) unless specifically approved by the CPM.

The WEAP shall address the possibility of encountering paleontological resources in the field, the sensitivity and importance of these resources, and legal obligations to preserve and protect these resources.

The training shall include:

- A) A discussion of applicable laws and penalties under the law;
 - B) Good quality photographs or physical examples of vertebrate fossils for project sites containing units of high paleontologic sensitivity;
 - C) Information that the PRS or PRM has the authority to halt or redirect construction in the event of a discovery or unanticipated impact to a paleontological resource;
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

- D) Instruction that employees are to halt or redirect work in the vicinity of a find and to contact their supervisor and the PRS or PRM;
- E) An informational brochure that identifies reporting procedures in the event of a discovery;
- F) A WEAP certification of completion form signed by each worker indicating that he/she has received the training; and
- G) A sticker that shall be placed on hard hats indicating that environmental training has been completed.

Verification:

- A) At least 30 days prior to ground disturbance, the project owner shall submit the proposed WEAP, including the brochure, with the set of reporting procedures for workers to follow.
 - B) At least 30 days prior to ground disturbance, the project owner shall submit the script and final video to the CPM for approval if the project owner is planning to use a video for interim training.
 - C) If the owner requests an alternate paleontological trainer, the resume and qualifications of the trainer shall be submitted to the CPM for review and approval prior to installation of an alternate trainer. Alternate trainers shall not conduct training prior to CPM authorization.
 - D) In the monthly compliance report (MCR), the project owner shall provide copies of the WEAP certification of completion forms with the names of those trained and the trainer or type of training (in-person or video) offered that month. The MCR shall also include a running total of all persons who have completed the training to date.
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PAL-5: The project owner shall ensure that the PRS and PRM(s) monitor, consistent with the PRMMP, all construction-related grading, excavation, trenching, and augering in areas where potential fossil-bearing materials have been identified, both at the site and along any constructed linear facilities associated with the project. In the event that the PRS determines full-time monitoring is not necessary in locations that were identified as potentially fossil bearing in the PRMMP, the project owner shall notify and seek the concurrence of the CPM.

- A) The project owner shall ensure that the PRS and PRM(s) have the authority to halt or redirect construction if paleontological resources are encountered. The project owner shall ensure that there is no interference with monitoring activities unless directed by the PRS. Monitoring activities shall be conducted as follows:
- B) Any change of monitoring from the accepted schedule in the PRMMP shall be proposed in a letter or email from the PRS and the project owner to the CPM prior to the change in monitoring and must be included in the monthly compliance report. The letter or email shall include the justification for the change in monitoring and be submitted to the CPM for review and approval.
- C) The project owner shall ensure that the PRM(s) keep a daily monitoring log of paleontological resource activities. The PRS may informally discuss paleontological resource monitoring and mitigation activities with the CPM at any time.
- D) The project owner shall ensure that the PRS notifies the CPM within 24 hours of the occurrence of any incidents of non-compliance with any paleontological resources Conditions of Certification. The PRS shall recommend corrective action to resolve the issues or achieve compliance with the Conditions of Certification.
- E) For any significant paleontological resources encountered, either the project owner or the PRS shall notify the CPM within 24 hours, or Monday morning in the case of a weekend event, where construction has been halted because of a paleontological find.

The project owner shall ensure that the PRS prepares a summary of monitoring and other paleontological activities and that the summary is included in the monthly compliance reports. The summary shall include: the name(s) of PRS or PRM(s) active during the month; general descriptions of training and monitored construction activities; and general locations of excavations, grading, and other activities. A section of the report shall include the geologic units or subunits encountered, descriptions of samplings within each unit, and a list of identified fossils. A final section of the report shall address any issues or concerns about the project relating to paleontologic monitoring, including any incidents of non-compliance or any changes to the monitoring plan that have been approved by the CPM. If no monitoring took place during the month, the report shall include an explanation in the summary as to why monitoring was not conducted.

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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Verification: The project owner shall ensure that the PRS submits the summary of monitoring and paleontological activities in the MCR. When feasible, the CPM shall be notified 10 days in advance of any proposed changes in monitoring different from the plan identified in the PRMMP. If there is any unforeseen change in monitoring, the notice shall be given as soon as possible prior to implementation of the change.

PAL-6: The project owner, through the designated PRS, shall ensure that all components of the PRMMP are adequately performed including collection of fossil materials, preparation of fossil materials for analysis, analysis of fossils, identification and inventory of fossils, the preparation of fossils for curation, and the delivery for curation of all significant paleontological resource materials encountered and collected during project construction.

Verification: The project owner shall maintain in his/her compliance file copies of signed contracts or agreements with the designated PRS and other qualified research specialists. The project owner shall maintain these files for a period of three years after project completion and approval of the CPM-approved paleontological resource report (see Condition of Certification PAL-7). The project owner shall be responsible for paying any curation fees charged by the institution for fossils collected and curated as a result of paleontological mitigation. A copy of the letter of transmittal submitting the fossils to the curating institution shall be provided to the CPM.

PAL-7: The project owner shall ensure preparation of a Paleontological Resources Report (PRR) by the designated PRS. The PRR shall be prepared following completion of the ground-disturbing activities. The PRR shall include an analysis of the collected fossil materials and related information and submit it to the CPM for review and approval.

The report shall include, but is not limited to: a description and inventory of recovered fossil materials; a map showing the location of paleontological resources encountered; determinations of sensitivity and significance; and a statement by the PRS that project impacts to paleontological resources have been mitigated below the level of significance.

Verification: Within 90 days after completion of ground-disturbing activities, including landscaping, the project owner shall submit the PRR under confidential cover to the CPM.

LAND

LAND-1: The project owner shall adjust the boundaries of all parcels or portions of parcels that constitute the Rice Solar Energy Project site, identified in the project Application for Certification (AFC) as Riverside County Assessor's Parcel Numbers 801-070-003, 801-070-004, 801-100-005, and 801-100-006, excepting all project elements within the Bureau of Land Management (BLM)-approved, project-related Rights-of-Way (ROWs) and linear easements, or other independent ROWs or privately held easements, as necessary to merge all properties into a single parcel, under single control and ownership, in accordance with provisions and procedures set forth in the County of Riverside's Ordinance #460.151; Ordinance #348, §§ 15.1 and 15.2; and the Comprehensive General Plan of Riverside County.

Verification: At least 30 days prior to the start of site preparation and construction, the project owner shall submit evidence to the Energy Commission Compliance Project Manager (CPM), indicating approval of the parcel merger by Riverside County. The submittal to the CPM shall include evidence of compliance with all conditions and requirements associated with the approval of the Certificate of Parcel Merger by the county, including a copy of the recorded deed or Record of Survey and the "Notice of Lot Line Adjustment". All parcels must be under common ownership at the time of merger.

LAND-2: The project owner shall obtain a recorded easement from all affected private property owners, authorizing the use of those portions of privately-owned lands that would be impacted by construction and operation of any project-related utility lines or pipelines, transmission line alignments, corridors, access roads, and/or the proposed interconnection substation. Temporary access for surveys may occur before the permanent easement(s) is recorded, provided permission to access the property is obtained from the owner or owner's designated representative prior to entering the property.

Verification: At least 30 days prior to the start of construction activities on any private lands, including delivery of materials, the project owner shall provide a copy of a recorded easement to the CPM on any affected properties. The project owner shall also provide copies of any access agreements with the property owner(s) and advise the CPM and property owner(s), in writing, of any intended entry onto private lands for surveys or other site evaluations at least three days prior to entry. Copies of all correspondence regarding rights of entry shall also be provided to the CPM within 10 days of receipt.

LAND-3: The project owner shall obtain a Right-of-Way Grant (ROW Grant) from the Bureau of Land Management (BLM), authorizing use of those portions of BLM-managed public lands that would be impacted by utility lines or pipelines, transmission line alignments, corridors, access roads, and/or the proposed interconnection substation footprint. An approved Plan of Development shall be made a part of the right-of-way grant. Any relocation, additional construction, or use that is not in accordance with the approved Plan(s) of Development

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

and Energy Commission licensing and certification requirements shall not be initiated without the prior written approval of BLM's Authorized Officer and the CPM.

Verification: At least 30 days prior to the start of construction and prior to any Notice to Proceed with construction issued by BLM's Authorized Officer and the CPM, the project owner shall provide BLM's Authorized Officer (AO) and the CPM with documentation of the following:

- A) BLM's ROW Grant and final approved Plan of Development;
 - B) The bond satisfactory to BLM's AO; and
 - C) Certification that the project owner acknowledges the project's development and all applicable construction, operation, maintenance, and closure activities shall be conducted in conformance with the approved Plan of Development and Energy Commission licensing requirements (and any subsequent amendments), and within the approved ROW boundaries, for the life of the project.
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LAND-4: Activities blocking or limiting access to Rice Valley Road, or construction within the boundaries of the Rice Valley (Keoughs) Rangeland Grazing Allotment (#CA06001), shall not occur during the established seasonal grazing period, currently March 1 – April 30 of each year. No open trenches or construction materials that could endanger livestock shall be accessible within the allotment boundaries. Activities, such as surveys, that would not interfere with or endanger grazing livestock are exempt from this condition.

Verification: At least 30 days prior to the start of each allotted grazing season, the project owner shall provide BLM's AO and the CPM with a copy of the construction workplan, confirming cessation of construction activities and implementation of any site protection needed for the duration of the grazing season. Site visits for verification are at the discretion of BLM and the CPM.

LAND-5: The project owner shall ensure that all project-related facilities on private lands, including temporary construction parking and laydown area(s), are constructed and operated in compliance with all applicable Riverside County land use laws, ordinances, regulations, and standards, including zoning and building code requirements, except as noted in this document.

The project owner shall submit a development plan to the Riverside County Planning Department in sufficient time to review for substantial conformance and comment, and to the Energy Commission's CPM for review and approval prior to the proposed start of construction. The development plan shall include all elements normally required for review and permitting of a similar project, including site plan, structural dimensions, design and exterior elevation(s), and proof of any required permits. The project owner shall pay applicable Planning Department fees, if any, for review of the plan.

Verification: At least 90 calendar days prior to the start of construction, including any grading or site remediation on the power plant project site or its associated easements, the project owner shall submit the proposed development plan to the Riverside County Planning Department to review for substantial conformance with county regulations and comment, and to the CPM for review and approval. The project owner shall also provide the CPM with copies of the transmittal letter to Riverside County and any associated correspondence.

At least 30 calendar days prior to the start of construction, the project owner shall provide copies of any comment letters received from the local jurisdiction, along with any changes to the proposed development plan, to the CPM for review and approval.

LAND-6: Prior to the start of commercial operation, upon final inspection, or with issuance of a certificate of occupancy, as required by the County of Riverside, the project owner shall pay the required development impact fee (DIF) for the project area to the County of Riverside, in accordance with Riverside County Ordinance 659 (as amended through 659.8), as it applies to large scale renewable energy projects. Alternately, the applicant may enter into a development or similar agreement with the County of Riverside that, in the county's opinion, meets the DIF requirements of this ordinance. Fees shall be based on the Desert Center-CV Center Commercial development rate of \$12,367 per acre, as established by the August 20, 2009 fee schedule. DIF acreage calculations shall include all power block facilities and all primary paths of travel, on the project site, leading to production plant area(s), including access roads, but not solar fields or solar field maintenance roads.

The project owner shall submit a copy of the receipt or comparable document demonstrating payment of the DIF or a copy of the approved development or similar agreement with the County of Riverside and a letter from the County stating that said agreement meets the county's DIF requirements to the CPM prior to the start of commercial operation.

Verification: At least 30 days prior to the start of commercial operation, the applicant shall submit to the CPM a copy of the receipt or comparable document demonstrating payment of the DIF or a copy of the approved development or similar agreement with the County of Riverside and a letter from the County stating that said agreement meets the county's DIF

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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requirements.

LAND-7: The project owner shall ensure that all permanent telephone and electric transmission lines serving the project site, located within or immediately adjacent to the SR 62 highway corridor, shall be installed underground for the entire length from the existing service connection to the on-site facilities. Temporary service lines installed in rights-of-way that preclude underground utility installation shall be exempt from this requirement.

Verification: The project owner shall provide the CPM of proof of underground utility installation, either as a copy of the final inspection or photos, prior to the start of commercial operations.

LAND-8: The project owner shall submit a Parking Plan for construction parking to the CPM for review and approval prior to the start of construction. The Construction Parking Plan shall be consistent with Riverside County parking requirements for space size and circulation, and shall meet the following requirements:

- A) One parking space for each daily-commute employee, based on an average of the number of workers expected to be on-site between months 8-20;
- B) One space for each company vehicle;
- C) One commuter vanpool space for every 20 employees;
- D) Three visitor spaces immediately adjacent to the main construction office (trailer), including one handicapped van-accessible space, with provisions to allow accessibility to and into the main construction office;
- E) A compacted all-weather surface of rock, decomposed granite, or similar material shall be installed on all temporary parking areas; and
- F) Striping of the employee, visitor, and company vehicle parking spaces. If surface materials preclude use of striping, the project owner shall ensure vehicles are parked in a manner that maintains adequate circulation patterns and provides adequate square footage to accommodate the required number of parking spaces, consistent with Riverside County parking requirements.

The project owner shall also submit a Parking Plan to the CPM for review and approval for the operational phase of the project, prior to the start of commercial plant operation. The Operations Parking Plan shall be consistent with Riverside County parking requirements for space size and circulation, and shall meet the following requirements:

- A) One parking space for every two employees;
- B) One space for each vehicle kept in conjunction with project operations (i.e., company vehicles);
- C) One commuter vanpool space;
- D) Loading spaces for delivery of materials and equipment, consistent with county requirements; and
- E) At least one handicapped van-accessible parking space immediately adjacent to the site office, consistent with requirements of the Riverside County code and the Americans with Disabilities Act (ADA), with adequate ADA access to and into the operations office.

Verification: At least 90 days prior to the start of construction, the project owner shall submit a Construction Parking Plan to the CPM for review and approval. The plan shall include all specified elements identified in condition of certification LAND-8 and be consistent with Riverside County parking requirements for space size and circulation.

At least 30 days prior to the start of construction, the project owner shall advise the CPM of the completion of the construction elements of the Construction Parking Plan. Either a site visit or area photography shall be used to verify compliance, at the CPM's discretion.

At least 90 days prior to the start of commercial operation, the project owner shall submit an Operations Parking Plan to the CPM for review and approval. The plan shall include all specified elements and be consistent with Riverside County parking requirements for space size and circulation.

At least 30 days prior to the start of commercial operations, the project owner shall advise the CPM of the installation and completion of the Operations parking requirements. Either a

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

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site visit or area photography shall be used to verify compliance, at the CPM's discretion.

LAND-9: The project owner shall submit a Landscaping Plan for the entrance, northern fenceline, and Historic Interpretive Roadside Stop (see condition of certification CUL-11) of the plant site to the CPM for review and approval prior to the start of commercial operations. The Plan shall also incorporate avoidance and minimization measures consistent with the Revegetation, Weed Management, and Special-Status Plant Remedial Action Plans (see conditions of certification BIO-10-12); and the restoration and revegetation plan for the staging and buffer areas (see condition of certification VIS-3).

The project owner shall use proper design fundamentals to reduce the visual contrast to the characteristic landscape, including the following:

- A) Use native, drought-resistant landscape plantings;
- B) Retain existing rock formations, vegetation, and drainage, unless significantly altered by construction activities;
- C) Avoid soil types that generate strong color contrasts;
- D) Retain as much of the existing vegetation as possible;
- E) Use natural, self-weathering materials and chemical treatments on surfaces to reduce color contrast; and
- F) Reduce the amount of disturbed area and blend the disturbed areas into the characteristic landscape. Place native or compatible soil, brush, rocks, and natural debris over disturbed areas and irrigation piping.

Verification: At least 90 days prior to the start of commercial operation, the project owner shall submit a Landscaping Plan for the entrance and Historic 23 Land Use

Interpretive Area of the plant site to the CPM for review and approval. The plan shall include a timeline for installation and continued maintenance and shall be consistent with all requirements listed in condition of certification LAND-9; the Revegetation, Weed Management, and Special-Status Plant Remedial Action Plans of conditions of certification BIO-10-12; and the VIS-3 restoration and revegetation plan for the staging and buffer areas.

Implementation of the Landscaping Plan shall commence to later than 30 days following CPM approval. The project owner shall provide quarterly progress reports to the CPM, including photographic documentation, until landscaping installation is complete. Landscaping shall be maintained and annual reports of landscaping condition and maintenance shall be provided to the CPM for the life of the project.

TRANSPORTATION

TRANS-1: The project owner shall consult with Riverside County, San Bernardino County, Cal-Trans, and Arizona and California Railroad and shall prepare and submit to the Compliance Project Manager (CPM) for approval a Construction Traffic Control Plan and implementation program. The Traffic Control Plan shall be prepared in accordance with Caltrans Manual on Uniform Traffic Control Devices and the WATCH Manual and shall include but is not limited to the following issues (as needed and as feasible):

Project Specific Measures:

- A) Encourage use of carpools, vanpooling or other ride share programs;
 - B) Scheduling heavy equipment and building materials deliveries;
 - C) Redirecting construction traffic with a flag person as needed;
 - D) Signing, lighting, and traffic control device placement if required;
 - E) Scheduling of construction work hours and arrival/departure times outside peak traffic periods as needed;
 - F) Ensurance of access for emergency vehicles to and within the project site;
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

- G) Ensurance of access and movement of bicycles along US-95 construction truck routes;
- H) Identification of haul routes requiring rail crossings of oversize vehicles and safety measures to limit potential impacts;
- I) Temporary closure of travel lanes or disruptions to street segments and intersections during generation tie line construction activities or any other utility tie-ins. In the event any lane closures are required on the State Highway System, the Construction Traffic Control plan shall demonstrate compliance with Caltrans Section 517 of the Encroachment Permits Manual;
- J) Access to residential and/or commercial property located near generation tie line routes or any other utility tie-ins; and
- K) Identification of safety procedures for exiting and entering the site access gate(s).

Cumulative Measures:

- A) Take into account the cumulative traffic impacts of the overlapping construction schedules of other nearby renewable energy projects utilizing SR 62, US 95, or any roadway indicated by the Construction Traffic Control Plan as a haul route, ensuring that timing of heavy equipment and building materials deliveries as well as worker trips of overlapping construction schedules do not result in SR 62, US 95, or any freeway/roadway to operate at an unacceptable LOS with the addition of cumulative construction traffic. These roadway LOS performance standards shall be established by the applicable General Plan, Congestion Management Plan, or overseeing agency of the utilized roadway; and
- B) If required, provide for a coordinated park-and-ride system of bus service for workers at nearby solar energy project sites.

Verification: At least 30 days prior to site mobilization the project owner or contractor shall provide to the CPM a copy of the Construction Traffic Control Plan and implementation program documents for review and approval.

TRANS-2: The project owner shall file FAA Form 7460-2 Notice of Actual Construction or Alteration with the FAA Air Traffic Airspace Branch

Traffic and Transportation (ASW-520) at least 10 days prior to the start of construction and within five days after the construction reaches its greatest height, or immediately following abandonment of the project. A copy of the filing and any related correspondence shall be forwarded to the CMP.

Verification: Within 10 days of the start of construction and, again, within five days after the construction reaches its greatest height, the project owner shall fill FAA Form 7460-2 with the appropriate FAA Air Traffic Airspace Branch and concurrently submit a copy of said completed form to the CPM. Copies of any additional correspondence related to this requirement shall be submitted to the CPM within 10 days of receipt.

TRANS-3: Following completion of project construction, the project owner shall repair any damage to public roadways affected by construction activity along with the primary roadways identified in the traffic control plan for construction traffic to the road's pre-project construction condition. Prior to the start of construction, the project owner shall photograph, videotape, or digitally record images of the roadways that will be affected by all heavy construction traffic and utility line construction. The project owner shall provide the CPM, Riverside County, San Bernardino County, and/or Caltrans with a copy of the images for the roadway segments under its jurisdiction. Also prior to start of construction, the project owner shall notify the Counties and/or Caltrans about the schedule for project construction, providing copies of such to the CPM. The purpose of this notification is to postpone any planned roadway resurfacing and/or improvement projects until after the project construction has taken place and to coordinate construction-related activities associated with other projects.

Verification: At least 30 days prior to site mobilization, the project owner or contractor shall provide to the CPM a copy of all photograph, videotape, or digitally record images of the roadways. Within 30 days after completion of the project, the project owner shall meet with the CPM and affected jurisdictions to determine and receive approval for the actions necessary and schedule to complete the repair of identified sections of public roadways to original or as near-original condition as possible. Following completion of any regional road improvements, the project owner shall provide to the CPM a copy of all required permits and a letter from affected jurisdictions if work occurred within its jurisdictional public right-of-way stating its satisfaction with the road repairs.

TRANS-4: The project owner shall comply with Caltrans, Riverside County, San Bernardino County, and other relevant jurisdictions limitations on vehicle sizes, weights, and travel

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

routes. In addition, the project owner shall obtain all necessary transportation and encroachment permits from Caltrans, Riverside County, San Bernardino County, and other relevant jurisdictions for roadway use.

Verification: In the Monthly Compliance Reports, the project owner shall submit copies of any permits received during that reporting period. In addition, the project owner shall retain copies of these permits and supporting documentation in its compliance file for at least six months after the start of commercial operation.

TRANS-5: The project owner shall comply with Riverside County Public Works requirements (Riverside County Ordinance 461) regarding road improvement standards and specifications, as they apply to the commercial driveway at the primary entrance to the facility. Internal access roads and secondary fire access road shall be constructed and maintained consistent with the requirements stipulated in the Worker Safety and Fire Protection section of this Decision.

Verification: In the Monthly Compliance Reports, the project owner shall submit copies of any permits and approvals received from Riverside County Public Works during that reporting period regarding compliance with Riverside County Ordinance 461 requirements for commercial driveway construction. In addition, the project owner shall retain copies of these permits and supporting documentation in its compliance file for the life of the project.

TRANS-6: The project owner shall prepare and implement a Heliostat Positioning Plan in coordination with the Avian Protection Plan specified in Condition of Certification BIO-25 that would minimize potential for human health and safety hazards and bird injury or mortality from solar radiation exposure.

Verification: Within 90 days before RSEP commercial operation, the project owner shall submit a Heliostat Positioning Plan (HPP) to the CPM for review and approval. The project owner shall also submit the plan to potentially interested parties that may include CalTrans, CHP, FAA, and the Department of Defense (DOD) Southwest Renewable Energy Work Group for review and comment and forward any comments received to the CPM. The Heliostat Positioning Plan shall accomplish the following:

- A) Identify the heliostat movements and positions (including reasonably possible malfunctions) that could result in potential exposure of observers at various locations including in aircraft, motorists, pedestrians and hikers in nearby wilderness areas to reflected solar radiation from heliostats;
 - B) Describe within the HPP how programmed heliostat operation would address potential human health and safety hazards at locations of observers, and would limit or avoid potential for harm to birds;
 - C) Prepare a monitoring plan that would: a) obtain field measurements in candela per meters squared and watts per meter squared to validate that the Heliostat Positioning Plan would avoid potential for human health and safety hazards consistent with the methodologies detailed in the 2010 Sandia Lab document presented by Clifford Ho, et al,³ including those referenced studies and materials within related to ocular damage, and b) provide requirements and procedures to document, investigate and resolve legitimate human health and safety hazard complaints prioritizing localized response (e.g., screening at location of complaint) regarding daytime intrusive light.
 - D) The monitoring plan should be made available to interested parties including CalTrans, CHP, FAA, and the Department of Defense (DOD) Southwest Renewable Energy Work Group and be updated on an annual basis for the first 5 years, and at 2-year intervals thereafter for the life of the project.
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TRANS-7: The project owner shall prepare a Power Tower LMVR Plan to provide procedures to conduct measurements and to document complaints regarding distraction effects to aviation, vehicular and pedestrian traffic associated with the RSEP solar receiver tower.

Verification: No later than 60 days prior to RSEP commercial operation, the project owner shall provide a Power Tower LMVR Plan applicable to RSEP for review and approval by the CPM. The plan shall specify procedures to document and investigate complaints regarding intrusive light, and report these to the CPM within 10 days of receiving a complaint.

The project owner shall measure the intensity of the luminance of light in candelas per meter squared and watts per meter squared reflected from the solar receiver tower according to the following:

- A) Within 90 days following commercial operation;
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³ C.K. Ho, C.M. Ghanbari, and R.B. Diver, 2010, Methodology to Assess Potential Glare Hazards from Concentrating Solar Power Plants: Analytical Models and Experimental Validation, ES2010-90053, in proceedings of the ASME 2010 4th International Conference on Energy Sustainability, Phoenix, AZ, May 17-22, 2010.

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

- B) If a major design change is implemented that results in an increase of the reflective luminance of the RSEP solar receiver tower; and
 - C) After receiving a complaint regarding a distraction associated with the central solar receiver from a location where previous measurements were not taken.
 - D) The Power Tower LMVR Plan shall include provisions for the following:
 - 1) Provide measurement data within 30 days to potentially interested parties that may include CalTrans, CHP, FAA, and the Department of Defense (DOD) Southwest Renewable Energy Work Group for review and comment, and to the CPM for review and approval.
 - 2) Measurement of luminance at the locations where any distraction effects have been reported and at the locations nearest the solar receiver tower from the four sides of the power plant boundary, and the nearest public road, which may be substituted for one of the sides of the solar receiver tower during the time of day when values would be highest;
 - 3) Measurement of luminance using an illuminance meter, photometer, or similar device and reporting of data in photometric units (candelas per meter squared and watts per meter squared); the measurements are intended to provide a relative and quantifiable measure of luminance that can be associated with any observed and reported distraction effect from the solar receiver tower.
 - 4) Provisions for documenting reported distraction and if the solar receiver tower is identified as a safety concern; the project owner shall consider reasonable localized mitigation measures that are technically and financially feasible. The localized mitigation measures may include signage for or screening of the affected area or other reasonable measures.
 - 5) Post-mitigation verification; Within 30 days following the implementation of mitigation measures designed to reduce localized impact of the solar receiver tower, the project owner shall repeat the luminance measurements to demonstrate the effectiveness of mitigation measures and provide the new measurement data for review and comment by interested parties that may include CalTrans, CHP, FAA, and the Department of Defense (DOD) Southwest Renewable Energy Work Group, and for review and approval by the CPM.
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TRANS-8: The project owner shall install obstruction marking and lighting on the solar receiving tower, consistent with both the FAA and DOD requirements, as expressed in the following documents:

- A) FAA Advisory Circular 70/7460-1K, Change 2: Obstruction Marking and Lighting, 24-hour medium-strobes;
- B) Air Force Aviation Safety: Flight Safety Flash 09-01; and
- C) Traffic and Transportation
- D) FAA Safety Alert for Operators (SAFO) 09007.

Temporary lighting shall be installed on the top of the structure once the construction height has exceeded 200 feet AGL, activated within five days of installation, and maintained in operation 24 hours a day, 7 days a week until construction is complete. Permanent lighting consistent with all requirements shall be installed and activated within five days of completion of construction. Lighting shall be operational 24 hours a day, 7 days a week, for the life of the project and until such time as the tower no longer exists at a height exceeding 200 feet AGL. Upgrades to the required lighting configurations, types, location, or duration shall be implemented consistent with any changes to FAA or DOD obstruction marking and lighting requirements.

Verification: At least 60 days prior to the start of construction, the project owner shall submit final design plans for the power plant solar receiving tower that depict the required air traffic obstruction marking and lighting to the CPM for approval.

Within five days of completion of the solar receiving tower to a height exceeding 200 feet AGL, the project owner shall install and activate temporary obstruction marking and lighting at the top of the structure and shall maintain temporary lighting at the top of said structure until construction of the tower is complete. The project owner shall inform the CPM in writing within 10 days of the time the lighting is first installed and activated.

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

Within five days of completion of the tower construction, the project owner shall install and activate permanent obstruction marking and lighting consistent with both FAA and DOD requirements and shall inform the CPM in writing within 10 days of installation and activation. The lighting shall be inspected and approved by the CPM (or designate inspector) within 30 days of activation.

TRANS-9: The project owner shall initiate the following actions to ensure pilots are aware of the project location, maximum height, and potential hazards to aviation:

- A) Submit a letter to the FAA requesting a Notice to Airmen (NOTAM), Category D, be issued, advising pilots of the location of the RSEP and height of the solar receiving tower, and recommending that overflight of the project site below 1,500 feet AGL should be avoided. The letter should also request that the NOTAM be maintained in active status until all navigational charts and Airport Facilities Directories (AFDs) have been updated.
- B) Submit a letter to Mr. Anthony M. Parisi, PE –Department of Defense (DOD) Southwest Renewable Energy Work Group, requesting a military advisory be issued, advising military units and training offices using the low-level military training routes (MTRs) in the vicinity of the project site of the location of the RSEP and height of the solar receiving tower, and recommending that training exercises requiring overflight of the project site (both solar receiving tower and solar arrays) below 1,100 feet AGL during daylight hours should be avoided. The letter should also request that the advisory be maintained in active status until all navigational charts and training patterns have been updated.
- C) Submit a letter to the FAA requesting a power plant depiction symbol be placed at the RSEP site location on the Los Angeles Sectional Chart, with a notice to “avoid overflight below 1,500 feet AGL”.
- D) Request the Los Angeles Enroute Traffic Control Center or Riverside Flight Service Station submit aerodrome remarks describing the location of the RSEP plant and advising against direct overflight of the solar receiving tower or solar heliostat arrays below 1,500 feet AGL to the:
- E) FAA National Aeronautical Charting Office (Airport/Facility Directory, Southwest United States),
- F) Jeppesen Sanderson Inc. (JeppGuide Airport Directory, Western Region), and
- G) Airguide Publications (Flight Guide, Western States)

Verification: Within 30 days after the start of construction, the project owner shall submit draft language for the FAA and military letters of request to the CPM for review and approval. The project owner shall submit the letters of request to the appropriate agencies within 10 days of receiving CPM approval. If no response is received with 45 days (at least 60 days prior to the start of operations), the project owner shall follow up with a letter to the respective agencies to confirm implementation of the request. A copy of any resulting correspondence shall be submitted to the CPM with 10 days of receipt. The project owner shall contact the CPM with 72 hours if notified that any or all of the requested notices cannot be implemented. The project owner shall also advise the CPM at least 15 days prior to the start of operations if any of the notified agencies have failed to respond to these requests.

Within 10 days of installing and activating temporary obstruction marking and lighting at the top of the solar receiving tower, but no later than 60 days prior to the start of operations, the project owner shall submit the required letters of request to the FAA and DOD Southwest Renewable Energy Work Group, with to the CPM. A copy of any resulting correspondence shall be submitted to the CPM with 10 days of receipt.

TRANS-10: The project owner shall modify the project's equipment and radio frequency use as necessary to avoid interference with Department of Defense (DOD) military activities, in consultation with the DOD Southwest Renewable Energy Work Group. DOD recommendations, including substitution or modification of equipment or operations, shall be fully implemented prior to or in conjunction with the installation and operation of electronic systems that could result in frequency interference. Prior to the start of operations, the project owner shall provide, to the CPM, written confirmation from DOD that the frequency spectrum usage for the project, as modified, would not interfere with DOD activities.

Verification: At least 90 days prior to the scheduled installation of any equipment capable of producing frequencies that could interfere with DOD operations, the project operator shall consult directly with the DOD Southwest Renewable Energy Work Group and provide details of said equipment to the DOD staff and CPM for evaluation. The project owner shall provide complete information concerning any intended changes to previously approved equipment, project design, or operational procedures; and all correspondence between the project owner, facilities personnel, and DOD representatives to the CPM for review and approval at least 30 days prior to any scheduled equipment installation date or start of operations, whichever occurs first. DOD recommendations, including substitution or modification of equipment or operations, shall be fully implemented prior to or in conjunction with the installation of electronic systems that could result in frequency interference. Copies of any additional correspondence shall be provided to the CPM within 10 days of receipt. The

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

project owner shall provide written verification from DOD to the CPM that the frequency spectrum usage, as modified, would not interfere with DOD activities and that all equipment, installation, and operational procedures comply with DOD requirements at least 10 days prior to the start of operations.

NOISE

NOISE-1: At least 15 days prior to the start of ground disturbance, the project owner shall notify all residences and businesses, if any, within three miles of the project site boundaries and one-half mile of linears, by mail or other effective means, of the commencement of project construction. At the same time, the project owner shall establish a telephone number for use by the public to report any undesirable noise conditions associated with the construction and operation of the project and include that telephone number in the above notice. If the telephone is not staffed 24 hours per day, the project owner shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be posted at the project site during construction in a manner visible to passersby. This telephone number shall be maintained until the project has been operational for at least one year.

Verification: Prior to ground disturbance, the project owner shall transmit to the Compliance Project Manager (CPM) a statement, signed by the project owner's project manager, stating that the above notification has been performed and describing the method of that notification, verifying that the telephone number has been established and posted at the site, and giving that telephone number.

NOISE-2: Throughout the construction and operation of RSEP, the project owner shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints. The project owner or authorized agent shall:

- A) Use the Noise Complaint Resolution Form (below), or a functionally equivalent procedure acceptable to the CPM, to document and respond to each noise complaint;
- B) Attempt to contact the person(s) making the noise complaint within 24 hours;
- C) Conduct an investigation to determine the source of noise related to the complaint;
- D) Take all feasible measures to reduce the noise at its source if the noise is project related; and
- E) Submit a report documenting the complaint and the actions taken. The report shall include: a complaint summary, including final results of noise reduction efforts, and if obtainable, a signed statement by the complainant stating that the noise problem is resolved to the complainant's satisfaction.

Verification: Within five days of receiving a noise complaint, the project owner shall file a copy of the Noise Complaint Resolution Form with the CPM, documenting the resolution of the complaint. If mitigation is required to resolve a complaint, and the complaint is not resolved within a three-day period, the project owner shall submit an updated Noise Complaint Resolution Form when the mitigation is implemented.

NOISE-3: The project owner shall submit to the CPM for review and approval a noise control program and a statement, signed by the project owner's project manager, verifying that the noise control program will be implemented throughout construction of the project. The noise control program shall be used to reduce employee exposure to high noise levels during construction to comply with applicable OSHA and Cal/OSHA standards.

Verification: At least 30 days prior to the start of ground disturbance, the project owner shall submit to the CPM the noise control program and the project owner's project manager's signed statement. The project owner shall make the program available to Cal/OSHA upon request.

NOISE-4: Following the project's first achieving a sustained output of 90 percent or greater of rated capacity, the project owner shall conduct an occupational noise survey to identify the noise hazardous areas in the facility.

The survey shall be conducted by a qualified person in accordance with the provisions of Title 8, California Code of Regulations sections 5095–5099 and Title 29, Code of Federal Regulations section 1910.95. The survey results shall be used to determine the magnitude of employee noise exposure.

The project owner shall prepare a report of the survey results and, if necessary, identify proposed mitigation measures that will be employed to comply with the applicable California and federal regulations.

TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

Verification: Within 30 days after completing the survey, the project owner shall submit the noise survey report to the CPM. The project owner shall make the report available to OSHA and Cal/OSHA upon request.

VISUAL

VIS-1: The project owner shall treat all non-mirror surfaces of the outermost row or rows (as needed) of heliostats in the northern 180-degree circumference of the mirror field; and all other project structures and buildings visible to the public such that: a) their colors minimize visual intrusion and contrast by blending with their existing visual background: in the case of lower buildings and structures, bajadas and mountain slopes as seen from the highway; in the case of foreground generation tie line towers, the valley floor; in the case of the solar tower, the pigment of natural cement substantially similar to the simulation shown in Exhibit 53 to this proceeding; b) colors and finishes of all components, including mirror support structures, tie line poles and conductors, do not create glare or specular reflection; and c) their colors and finishes are consistent with local policies and ordinances. The generation tie line conductors and arms shall be non-specular and non-reflective, and the insulators shall be non-reflective and non-refractive. This measure shall include coloring of security fencing with vinyl or other non-reflective coating to blend visually to the greatest feasible extent with the background soil.

The project owner shall submit for CPM review and approval, a specific Surface Treatment Plan that will satisfy these requirements. The treatment plan shall include:

- A) A description of the overall rationale for the proposed surface treatment, including the selection of the proposed color(s) and finishes;
- B) A list of each major project structure, building, tank, pipe, mirror support, and wall; the generation tie line towers and/or poles; and fencing, specifying the color(s) and finish proposed for each. Colors must be identified by vendor, name, and number; or according to a universal designation system;
- C) One set of color brochures or color chips showing each proposed color and finish;
- D) A specific schedule for completion of the treatment; and

E. A procedure to ensure proper treatment maintenance for the life of the project.

The project owner shall not specify to the vendors the treatment of any buildings or structures treated during manufacture, or perform the final treatment on any buildings or structures treated in the field, until the project owner receives notification of approval of the treatment plan by the CPM. Subsequent modifications to the treatment plan are prohibited without CPM approval.

Verification: At least 90 days prior to specifying to the vendor the colors and finishes of the first structures or buildings that are surface treated during manufacture, the project owner shall submit the proposed treatment plan to the CPM for review and approval and simultaneously to Riverside County for review and comment. If the CPM determines that the plan requires revision, the project owner shall provide to the CPM a plan with the specified revision(s) for review and approval by the CPM before any treatment is applied. Any modifications to the treatment plan must be submitted to the CPM for review and approval.

Prior to the start of commercial operation, the project owner shall notify the CPM that surface treatment of all listed structures and buildings has been completed and they are ready for inspection and shall submit to each one set of electronic color photographs from the same key observation points identified in (d) above.

Visual Resources The project owner shall provide a status report regarding surface treatment maintenance in the Annual Compliance Report. The report shall specify a) the condition of the surfaces of all structures and buildings at the end of the reporting year; b) maintenance activities that occurred during the reporting year; and c) the schedule of maintenance activities for the next year.

VIS-2: To the extent feasible and consistent with safety and security considerations, the project owner shall design and install all temporary and permanent exterior lighting so that:

- A) Lighting does not cause excessive reflected glare
 - B) Lighting does not illuminate the nighttime sky either directly or indirectly
 - C) Mounting heights of all lighting fixtures will not allow light to fall on the mirror surfaces of the solar thermal power generation reflector systems in any night time position
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TABLE A5-1 (CONTINUED)
ADOPTED MITIGATION MEASURES APPLICABLE TO THE RICE SOLAR ENERGY PROJECT

Mitigation Measure

- D) Illumination of the project and its immediate vicinity is minimized as to times of use and extent
- E) Lighting on the solar receiver tower shall be the minimum needed to satisfy safety and security concerns.

Permanent night lighting shall comply with all applicable standards, best practices and regulations including specifically, the following Illuminating Engineering Society documents for Lighting Zone 1 per CEC-400-2008-017-CMF-Rev I:

- A) RP-33-99 Lighting for Exterior Environments
- B) DG-13-99 Outdoor Lighting
- C) TM-10-00 Addressing Obtrusive Light (Urban Sky Glow and Light Trespass) in Conjunction with Roadway Lighting
- D) TM-15-07 Luminaire Classification System for Outdoor Luminaires

Verification: At least 90 days prior to ordering any exterior lighting, the project owner shall contact the CPM to show compliance with all of the above requirements. This shall include, but not be limited to, final lighting plans, fixture and control schedules, fixture and control cut sheets and specifications, a photometric plan showing vertical and horizontal footcandles at all property lines to a height of 20 feet, and the proposed time clock schedule or occupancy sensor programming.

Prior to construction and prior to commercial operation, the project owner shall notify the CPM that the installation of the temporary and permanent lighting has been completed and is ready for inspection. If after inspection the CPM notifies the project owner that modifications to the lighting are needed, within 90 days after receiving the notification the project owner shall implement the modifications and notify the CPM when the modifications are completed and ready for inspection.

Within 48 hours of receiving a lighting complaint, the project owner shall provide the CPM with a complaint resolution form as specified in the Compliance General Conditions, including a proposal to resolve the complaint, and a schedule for implementation of the proposed resolution. The project owner shall notify the CPM within 48 hours after completing the resolution of the complaint. A copy of the complaint resolution form report shall be submitted to the CPM within 30 days and included in the Annual Report.

VIS-3: To address potential impacts to motorists on SR 62 during and after the period of project construction, all construction laydown, administration, parking and other construction-related facilities shall be setback from SR-62 a minimum of 100 feet, or greater where feasible. The soil surface and vegetation of the set-back area south of the highway shall remain undisturbed to the maximum extent feasible, except to accommodate the minimum practical number of access drive-ways, or to enhance existing native vegetation.

All construction-related lighting shall be shielded, downwardly directed, with all direct lighting limited to within the project site.

Following completion of construction, the project owner shall provide a re-vegetation plan describing how the staging site will be restored, and the buffer zone area enhanced, following construction. The plan shall call for beginning of restoration of the site within the shortest feasible time following completion of construction. Under the plan, all disturbed areas shall be graded to conform to surrounding natural contours, and re-vegetated with locally native species.

Verification: At least 90 days prior to start of construction, the project owner shall present to BLM's Authorized Officer and the CPM a revised staging area site plan including a set-back from SR-62 of at least 100 feet. If the CPM determines that the plan requires revision, the project owner shall provide to the CPM a revised plan for review and approval by the CPM. The project owner shall not begin construction until receiving CPM approval of the revised plan.

At least 60 days prior to start of operation, the project owner shall present to the CPM a restoration and revegetation plan for the staging and buffer areas. If the CPM determines that the plan requires revision, the project owner shall provide to the CPM a revised plan for review and approval by the CPM. The project owner shall not begin operation until receiving CPM approval of the revised plan.
